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To Mr Long
from the Author



PRACTICAL
OBSERVATIONS
ON THE
NATURAL HISTORY AND CURE
OF THE
VENEREAL DISEASE.

PRACTICAL
OBSERVATIONS
ON THE
NATURAL HISTORY AND CURE
OF THE
VENEREAL DISEASE.

IN TWO VOLUMES.

BY JOHN HOWARD,
FELLOW OF THE ROYAL COLLEGE OF SURGEONS, LONDON.

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PRACTICAL OBSERVATIONS

ON THE

VENEREAL DISEASE.

*Observations on the Treatment of Particular
Symptoms.*

HAVING in the foregoing pages made some general remarks on the medical properties of mercury in *Lues Venerea*, I mean, at present, to point out more particularly the application of those properties to the several stages of the disease. And that the reader's attention may be the more readily fixed to its proper object, I shall note as I proceed the medical treatment of each individual symptom mentioned in the first volume of this work. The former arrangement on the application of mercury was a general one; in which I endeavoured to shew the different degrees of power in the medicine, under different circumstances, and was meant as a

foundation for this part of the work. I am now to adapt that power, as far as I am able, to particular symptoms, having, at the same time, a reference to the specific disease, as the source from which all these symptoms originate. To this end, the quantity of mercury introduced into the circulation, the effects of that medicine on the system and mouth, together with that influence, or power, which naturally arises from a just combination of effect with quantity, must be attended to, and proportioned to the different stages or degrees of virulence in the disease. If the first of these requisites (the aggregate quantity) be wanting, the effects of the medicine, how violent soever they may be on the constitution, or mouth, will frequently fail. And on the other hand, if, through inattention or want of judgment, these effects are never produced, the same misfortune will frequently follow from the largest quantity. Therefore, that seems to be the most successful plan, in which certain effects on the constitution, and mouth, are raised by a due quantity of the medicine. Having already explained my ideas

very fully, as to the effects to be produced, I need not repeat them in this place. It may, however, be expected, that I should endeavour to fix and ascertain the quantity of mercury generally necessary for a cure. But as this has been shewn to be indefinite, and fluctuating, it will be best left to the judgment of the practitioner. As a general rule, I shall only say, that from a just consideration of the symptoms before him, whether primary or secondary, whether of an early or late date, when joined to a proper degree of attention to the effects and quantity of the medicine taken in, or absorbed, he may easily ascertain this matter to a certainty. As I do not mean to give a recipe for every symptom, in the manner of a receipt-book, so I look upon it, that whoever knows the disease, and is in possession of the facts I have taken some pains to establish, with respect to the effects of the medicine, can be at no loss, as to a very safe and effectual method of using it, nor of applying it properly to the generality of cases that may occur, whether primary or secondary, whether slight or violent. An early

aphthous chancre in its first stage may not require for cure either so large a quantity of mercury, or such considerable effects, as a more obstinate primary or secondary symptom. But this is almost the only instance in which the disease considered abstractedly, and without a reference to *Gonorrhœa Virulenta*, can be said to require a smaller quantity, or slighter effects in one symptom than in another: A late chancre, an eruption, a node, and every secondary symptom whatever, demand, as parts of the same infectious disease, not only the same specific effects, but nearly the same specific quantity of the medicine. Thus, less than *Hydrarg. crud.* ʒviij. even under confinement, will seldom cure an early chancre, when used in the way of friction. In later symptoms ʒxvi. or more, are generally necessary, unless what is wanting in quantity is supplied by the violent operation of the medicine on the constitution and mouth; and these, it must be remembered, will often compensate for the want of quantity.* But very

* In the cure of a secondary symptom, under confinement, I have known thirty grains of *Hydrarg.* used by

frequently more will be required; it is impossible to lay down an absolute rule for all cases.

The general doses employed in frictions are, from *Hydr. crud. gr. xv. to ʒi. and upwards*, about a third part of which, and not more, may, perhaps, by rubbing for half an hour, get fairly into the circulation. I look upon *Hydrarg. gr. x. (Bals. sulph. ext.)* to be equal to *Ung. Mercur. fort. ʒij.* and so in proportion for a larger dose.

With respect to *Hydrarg. calcinat. calomel. solut. Hydrarg. muriat.* and some other chemical preparations of the mineral; as they vary greatly in point of strength; so are they very variable in their effects. The quantity necessary for a cure must of course be exceedingly different in them all. I shall therefore only observe, that the precise quantity of each

friction, when the effects on the mouth have been violent; cure within a short time—and on the other hand, I have observed a secondary symptom of the same kind, withstand the effects of the medicine, and not yield to it, under five weeks, though considerably more than eight ounces have been employed in the fairest manner.—As a general rule, perhaps the quantity of *Hydrarg.* for a primary symptom should be never less than ʒi., nor less than ʒij. for a secondary one: when (as I said before) the violence of its operation does not supply the place of quantity.

preparation is ascertainable by due attention to its strength and effects on the mouth, habit, and disease. As these effects appear under confinement, or in the alterative method of using mercury, in both which there is a very remarkable difference in the aggregate quantity necessary for a cure, as has been already very fully shewn. Perhaps the best of them is the *Hydrarg. calcin.* And this medicine I am convinced may be safely given for a continuance in a larger dose than has been customary. I have exhibited it to the quantity of *gr. ij. nocte maneqe*, by a gradual increase from the first dose; and with great effect; and in those whose bowels are not easily ruffled, it may perhaps be given in still larger doses.

*Early Chancre not very irritable, aphthous—date from the time of receiving infection, within threeweeks: vide vol. I. p. 23.** The cure conducted under confinement by frictions—the effects to be produced—fœtor of the breath, slight affection of the mouth, with or without mercurial

* I call this species of chancre aphthous—but it may with more propriety, be compared to a small spot, or portion of rusty bacon.

griping, or much increase of the salivary secretion towards the close of the course, and principally by the latter doses of the medicine.— Every friction, from the beginning to the end of the course, must be fairly performed for the space of half an hour, by the patient himself, with his naked hands. The dose originally begun with may, after a little time, be doubled, trebled, or quadrupled, as circumstances may direct; and, even at that increase, continued for the necessary, but indefinable period. At the close of which (as has been already said) the above effects, which mark in a slight manner the decisive operation of the medicine, should be produced, and they will, when raised by the proper quantity of mercury, shew a notable influence on the disease. The appearance of the chancre, after spreading a little, will alter: its callous edges and base will soften, it will grow clean, and become a healing sore. In some cases these effects happen after using the remedy for eight or ten days, even before the mouth becomes affected; but most frequently not till a few days later, when the mouth and system are evidently touched by the general operation of the medicine, at which

time the venereal ulceration heals almost immediately. But if it should not, the accumulation must be increased till that event takes place *fully*. The sore should be not only healed, but perfectly cicatrized without the smallest remaining hardness, and it may frequently be necessary to continue the medicine for two or three days longer. The disease is now only in its infancy, so that the effects of the medicine need not be at all violent, and they are so certain in their operation, that they entirely supersede the use of all topics, water and dry lint only excepted. And as the local irritation is in this stage of chancre too trifling to require attention, there can be no necessity for any other application.

When the sore has been thus perfectly healed by the general operation of the medicine alone, the parts must be kept clean, by washing them for a few days with soap and water.

If it be considered, that this symptom, slight as it seems, is the principal origin of all that train of consequences, which have been described under the head of secondary symptoms, it will not, I hope, be deemed a waste of time if I urge, in the most earnest manner, a due degree

of attention to the quantity of mercury introduced, and to its effects on the mouth, system, and disease. I leave the quantity to be determined by the judgment of the practitioner; and shall only say, that from the most accurate observations I have been able to make, from a great number of cases, it does not appear to me, that more than half what is generally necessary in a primary symptom of a much older date, or in a secondary one, is necessary in this stage of the disease, provided the general effects be fair and unequivocal.

I have hitherto supposed the medicine employed under confinement, which I am convinced, from numberless instances, is the most easy method, both for the patient and practitioner, when it can be complied with. But when this cannot be submitted to, either from the particular situation of the patient, his prejudices, or idiosyncrasy, an *alterative* method must be followed; and here the aggregate quantity of the medicine must be considerably increased, and the time of cure prolonged. It is however in general perfectly safe.

With respect to the conduct of it, care

should be taken, that the connexion between the several doses should be preserved, if possible, entire, and without the intermission of a single day, till a considerable accumulation is made. We will suppose, that not less than *Hydrarg. crud.* ℥ss. has been fairly used. The effects of the medicine should now be closely attended to; if the mouth is not affected, and the sore either at a stand, or but just beginning to look well, it will be evident, that the present quantity is insufficient for a cure. The accumulation must therefore be increased; and the usual dose doubled, or otherwise enlarged; and each dose will operate more powerfully if used at short intervals. When the violence of the effects does not call for a diminution, or discontinuance of the usual dose, the process should always be carried on from a quantity comparatively small, to a much larger. If this order is inverted, that is, if after employing a full dose, the practitioner either negligently, or without necessity, has recourse to a small one, or goes from a strong preparation to a weak one, the course is immediately checked, and the effects, to be expected from

it, weakened. With these precautions the medicine is to be urged till the sore heals, smoothly, perfectly, and without the smallest remaining hardness. In a case so recent, as that now supposed, by the fair introduction of a sufficient quantity of mercury, even though the effects on the mouth and habit should be so slight as to be scarcely perceivable, a cure will frequently follow, and that, when such quantity is by no means large, though always considerably larger, than in the method under confinement.

But it sometimes happens, even in this early state of the disease, that the mouth and system must be more evidently affected before the sore will heal, or shew the smallest tendency towards healing. Tenderness of the gums, foetor of the breath, disposition to increased secretion of the saliva, languor, prostration of strength, sudden emaciation, sometimes with, sometimes without a dysenteric kind of affection of the bowels, arising after a preceding costiveness, are the leading *external marks* denoting the *decisive internal changes*, which are at such time going on in the system, and as they are all synchro-

nous with these changes, they also are *decisive*; and as such, when a less powerful operation from the medicine has been tried and failed, may be considered as the precise point to which we may safely go. And it is very seldom that we need go beyond this point, and, in my opinion, we never ought to do it immediately, that is, without waiting the effect of these phænomena. If greater effects are to be produced, or a continuance of mercury be necessary, the course, though originally alterative, will most safely be finished, under a few days confinement.

Having thus in the first place secured a fair accumulation of the medicine, and then produced the natural effects from that accumulation towards the close of the course, whilst the system is loaded, we must wait the result. In some cases the sore immediately heals upon the coming on of these symptoms: when I say immediately, I mean in the short period of a night's time. But in others it may be three, four, or more days; for which time it will be right to trust to the present effects of the medicine, without attending to lessen or increase

them, unless the flag or become violent. Irritation will sometimes prevent a chancre from healing perfectly, even when the quantity of mercury has been a full one, and all the above effects in due degree; under that circumstance, after waiting for the operation of those effects on the sore for three or more days. *Hydrarg. nitrat. rub.* mixed with white cerate, may be employed dysenterically.

For the few days, during which the medicine is producing its decisive effects, irregularities on the side of the patient should be carefully guarded against, exposure to night-air and to cold should be avoided as much as possible; and if the bowels should be dysenterically affected, this symptom must be attended to.

It is very remarkable, but, as far as my observations have gone, I have constantly found it true, that an affection of the bowels, with griping and tenesmus from mercury, unlike every other dysenteric kind of affection, should never be treated by any kind of purgative, not even the most gentle. This should be particularly noted, for I have seen very great inconvenience arise from a non-attention to it. In

more than two hundred cases I have known this symptom, and that restlessness which often accompanies the short period, during which the medicine is rapidly producing its decisive effects, relieved immediately, as by a charm, solely by quieting the general and local irritation with a warm opiate. *Confect. opiat. gr. xx.* will generally answer this purpose effectually. But if a single dose should be insufficient, or produce only a temporary relief, it may be repeated every eight hours, or night and morning. It will add to the efficacy of the medicine, if the patient will keep himself warm, and compose himself on the bed for a few hours. Costiveness, with some slight increase of the tenderness of the gums, and disposition to an increased secretion of saliva, come on in consequence of this treatment; the patient finds himself greatly refreshed, and in a short time the whole of the effects subside. And, generally, from the moment irritation is quieted by the above means, the further use of mercury becomes unnecessary.

Some persons may perhaps think me premature, in applying the decisive effects of the me-

dicine thus early in the case of a recent chancre. They certainly are not always necessary in this stage of the symptom; a fair accumulation of the medicine, with a very slight affection of the mouth, without the dysenteric effect, being sometimes sufficient to heal the sore perfectly, and without danger from future consequences. In the method under confinement just given, I must beg to be understood with the same limitation. But instances do now and then occur in both courses, even in this stage of the disease, in which they must be produced.

In the habit, not naturally disposed to an affection of the mouth, the preceding costiveness, the slight foetor of the breath, the sudden emaciation, languor, and prostration of strength, &c. coming on after a considerable accumulation has been made, seem equally decisive, with the more evident effects of the medicine just pointed out, and as such may be relied upon.

The above method under confinement to effect a cure, takes up from fourteen to twenty-one, or more days. The alterative, four, five,

six weeks, and when the medicine operates with some degree of sluggishness, the time of cure may be two months, or longer.

I cannot pass over this early stage of the disease, without expressing an ardent wish that surgeons would endeavour to persuade their patients to submit to the use of mercury, *under confinement*, as soon as possible, upon discovering the disease—the exclusion from external air, the warm room, and the same treatment, whilst they are introducing the medicine; give it the fairest opportunity of having, for the time, be it longer or shorter, the fullest effect. And if it were more generally the practice, I am convinced, from long experience, that we should meet with but few secondary symptoms. So simple and so easy is the proper treatment of an early chancre, by which every other disagreeable consequence of the disease may be obviated!

I hope it will never be forgotten, that *Lues Venerea* may be cured, even in the worst stages of the disease, but with much less difficulty at this early period.

The same species of chancre when more ad-

vanced; the date from infection from three to six weeks, but still without inflammation or increased secretion of sebaceous matter. (Vide vol. I. pp. 29, 30.) The cure of this stage will be best performed under confinement, because the disease is at this period making hasty strides towards the natural time of an eruption: and if the medicine is not introduced, so as to anticipate this last symptom, the disease will be vastly more difficult of cure afterwards. In an alterative course, it frequently happens, that though the power of the medicine seems to keep off the eruption, yet the chancre remains at a stand, without healing. If a topic is used to promote the healing, and no further effects are produced from the specific, though it be still continued in considerable quantity, either an eruption, a sore throat, or some other secondary symptom will probably follow. It is, therefore, clear, that the great thing wanting, in the alterative course, is a due degree of force in the decisive effects of the remedy. Besides, from the constant irritation the part suffers by exercise, as well as from the slow effects of the medicine, this course does.

not always prevent the spreading of the sore. And this is another argument in favour of confinement, and that very necessary degree of quietude, which is the certain consequence of it. For these reasons, in the stage of chancre now under consideration, confinement is always preferable to an alterative course, when it can be used with propriety. And if that is the method pursued, even though the sore be of several weeks standing, and the disease going on quickly towards an eruption, yet, as the medicine will operate fully, and under the most favourable circumstances, the chancre seldom spreads much, or becomes highly irritable: after enlarging a little, it gets clean, and at length heals without any supervening affection of the sebaceous glands. Water, even in this case, is the best wash, and a small piece of soft fine lint, the best topic. But, if it should so happen, that more than that should, from the largeness and irritability of the sore, become necessary, *Hydrarg. nitr. rub. opt. lævig. gr. xx. cum. cerat. alb. ʒj.* will make the discharge less acrimonious, by thickening it; and the sore less irritable, without

healing it too soon. If the aggregate quantity of the specific is, what it ought to be, a full one, and used under confinement, it may not always be necessary to urge it till it produces a dysenteric affection. It is, however, in general, much safer to produce all the decisive effects of the medicine.

Alterative method. The application of this kind of course is nearly the same in this as in the preceding stage of chancre. The two stages only differ in date, and in the degree of virulence. And, therefore, the reason there given for the production of the most unequivocal decisive effects of the medicine will apply, more properly, to this stage than to that. And I hold it to be of excellent use when it can be done, to enjoin confinement for a few days towards the close of the course, that these effects may be fairly raised; and that no injury may arise from exposure to inclement weather, irregularities, &c. for this is the time, at which these circumstances may be more particularly dangerous. Every one sees the impropriety of a person, whilst under a course of mercury under confinement, exposing himself to these inconveniencies; and yet nothing is more com-

mon than to neglect this kind of care at this period of an alterative course. It may be said, that habit and the gradual exposure to air, &c. during a cure by this method, fortify the constitution sufficiently against the danger. During the former part of the course, and to the time at which the decisive effects are beginning to take place, this mode of reasoning may perhaps apply. But two reasons may be given, why, at this particular period, it is certainly inapplicable. In the first place, the inconveniencies I have mentioned will disturb the natural operation of the medicine.—In the next, every constitution appears to be infinitely more susceptible of the bad effects of cold air, &c. at this, than at any other period of the course, because the whole system is at such time in a weak and languid state, with every pore and every secretion open. In this stage of chancre, it is frequently necessary to urge the medicine in this kind of course, till it causes, not only the other considerable effects of mercury, but the dysenteric affection. When these circumstances are disregarded, the tedious period of two, or perhaps more months, must be waited

for, and even with that clog, the same suite of effects will be often required before the cure can be completed.

Chancre of nearly the same date with the preceding; but with considerable irritability, increased secretion from the sebaceous glands of the part, and disposition to phymosis.

The same general means of relief are applicable in this, as in the preceding case, and the proposition must be taken in its fullest extent. As to topics, if they can be avoided, so much the better. By attending, from time to time, to the state of the sore, the practice may be regulated as to the quantity of the medicine necessary, and as to its effects and operation on the disease. But, if the part is kept in motion by exercise, or otherwise irritated, that natural tendency which a late chancre always has to spread will be considerably increased: and the system being at the same time stimulated by the medicine, a phymosis may probably come on. To obviate this the part should be kept carefully clean, irritation should be quieted by opium, after having lowered the impetus of the circulation by evacuants, and

motion should be avoided as much as possible; having so done, the weak mercurial cerate, above recommended, may be tried. If it simply thickens the discharge, without increasing the irritability of the parts, it may be continued. But if it irritates too much, or the present subsisting irritation is very great, a lotion *ex calomel. et aq. rosar.* may be substituted. If this should not agree, a very weak solution of the *lotio antiseptic.* of Saint Bartholomew's hospital may be had recourse to. The latter is a very powerful sedative, but it is also an astringent, and as such apt to leave a hardness on the part. For which reason the mercurial is preferable. But as has been said before, avoid every active topic, and depend as much as possible upon syringing with tepid water, and keeping the parts clean.

It would be fortunate for the credit of the alterative method, if this plan, or indeed any other similar one, was generally effectual in obviating phymosis.

In this state of the disease, the most trifling irritation on the part from exercise, riding or intemperance, will frequently render these,

(and I firmly believe every other means conducted under the prevalent idea of an alterative course, particularly where a natural tendency to phymosis prevails,) abortive. Rest, absolute unequivocal rest, with every collateral assistance that can possibly be had, from quieting the local and general irritation, must be joined to the immediate, and most decisive effects from the remedy. If this is not done, the disease will either continue to make its ravages without a sufficient check, or, if the applications used locally, act powerfully, other symptoms, and in particular those of the secondary kind, will come on; and the parts quieted will continue in an unnatural, callous, diseased state. To prevent these disagreeable circumstances, rest must be procured by keeping the parts from motion under strict confinement; other means for quieting irritation must be also used, and the operation of the remedy should be complete in all its parts, and urged to the production of every essential requisite.

If the favourable time for obviating phymosis is neglected, or if the means employ-

ed to prevent this symptom fail of producing the desired effect, then, to the methods recommended above, there must be joined a more particular local treatment; for, on the latter, much will depend. The prepuce has, we will suppose, inflamed throughout, and no longer suffers the glans to be denuded; the discharge from the chancre, which is now highly irritable, from the contraction of the orifice of the prepuce lodges; there is an excoriation of the sebaceous glands on the surface of the balanus, and from the prepuce being internally in the same state, a thin, and very acrimonious secretion takes place, which adds very considerably to the irritation. The discharge from confinement, becomes every moment more and more stimulating; and unless the progress of the symptoms be checked, the prepuce will probably slough, and the glans, after suffering from the spreading of the chancres, makes its way through the aperture formed by this sloughing.

It sometimes is, sometimes is not practicable to prevent this train of symptoms—when the

prepuce will no longer suffer the glans to be denuded, and the parts are not yet in so highly irritable a state, as to be too tender to bear the use of frequent injections of warm water and other fluids between the glans and prepuce, *Inject. ex calomel. vel mercur. panacea alb. cum vel sine mucilag. gum Arab. or Lotio antisept.* diluted, may be employed. Opium must be used, guarding the patient at the same time from costiveness, and the specific introduced boldly, and in full doses. In some cases the impetus of the circulation must be previously lowered. These means, if used sufficiently early, will probably save the prepuce, and prevent much injury to the glans. But, as I have elsewhere hinted, under circumstances like these, salivation (taking the term in its common acceptation) is frequently a subordinate consideration, and must, at all events, be risked. For it may happen, that nothing but the coming on of a painful affection of the mouth will put a stop to the rapid progress of irritation on the glans and prepuce. The affection of the mouth seems, in this case, to act in a twofold way, by cor-

recting the virulence of the disease, on which the local irritation of the chancre depends; and by the revulsion which a new irritation, raised in a different part of the system, makes from the original one.

If the prepuce sloughs, the parts should be kept clean, by washing them with warm water, and with one or other of the above mercurial lotions, and afterwards dressed, *Cerat. Hydrarg. nitrat. rub.* If, during the separation of the parts, a considerable hæmorrhage should ensue, it may be checked by astringent sedatives locally; and the *cortex* given internally; but a slight bleeding will be salutary, and help to take off distention. During the inflammatory stage of a phymosis I would rely on opium, and the above means, rather than the *cortex*; but when the parts, from irritation or over-distention, have actually sloughed, the latter may be given in full doses. The sores, those I mean which are unavoidably the consequence of the sloughing, as well as the original chancres, are venereal, and, as such, require both a general and a local application of mercury. As an immediate dressing, a poul-

tice of boiled carrots, or of *farina lini*, will be found a very useful one, more especially if the parts ulcerated are at every dressing washed with one or other of the above-mentioned mercurial lotions.*

The irritable, livid, spreading, moist kind of chancre.

What there may be in this species of chancre to render it so peculiarly different from the other is difficult to say.

With respect to topics, which its great irritability, and the uncommon acrimony of the discharge seem to require, they are, for the most part, indispensably necessary. But if that happy medium can be found, of quieting the local irritation, whether it be done by opium, or other means, without the application, from its astringency, specific or sedative power healing the sore prematurely, a very great point will be gained. With regard to the general operation of the medicine,

* Or the sores may be dressed with lint, moistened with these lotions, and the part afterwards covered with a pledget of cerate.

the quantity should be a full one, and as great as in the more advanced state of an aphthous chancre ; and its effects should be in every particular complete. From the uncommon rapidity and virulence of this symptom this conduct appears to me necessary, even when no topic has been employed. But when sedatives have been used, it becomes infinitely more worthy of attention. And, in this case, I am of opinion, that nothing short of a large accumulation under strict confinement, and of the unequivocal production of the decisive external as well as internal general effects from mercury, will cure. A large accumulation, with only a slight affection of the mouth, without dysenteric affection, even under six weeks confinement, I know, in one case, did not cure: the sore, indeed, healed, but an ulceration of one of the tonsils came on two months afterwards ; and this happened, though the topic employed was nothing more than the *cerat. rub. mercur.* and so slightly impregnated with mercury, that it seemed to act in a very gradual manner, and more as a digestive than as a sedative.

It is sometimes absolutely necessary to employ *Lotio ex calomel*,* &c. merely to diminish the great irritability of the sore, and prevent phymosis, and mortification of the prepuce and glans; but whenever this is done, I am of opinion, that the general effects of the medicine should not only be such as I have just described, but that, in the attempt to bring on the decisive internal effects of mercury, even salivation may, (after a sufficient accumulation of the medicine), with propriety be risked. To speak the truth, relapses would probably be less frequent than they are, if the operation of the remedy was, generally, carried not only to the point of salivation, but continued under it for a sufficient time. The most proper time in every mercurial course for the employment of a powerful topic to chancre seems to be only during the three or four days at the close of the course, when the me-

* I cannot here avoid making a remark, which is I believe of some importance; a syringe which has been used during the infectious spreading state of a chancre, should be exchanged for a new one, so soon as the sores put on a kindly appearance from the action of mercury.

dicine is quickly producing its antivenereal effects. In every case where this period can with safety be waited for, it should, perhaps, be done. But when, from the havock likely to ensue immediately, in consequence of the irritable state of a chancre, or chancrous excoriation (as a less evil must ever give way to a greater) the use of sedatives is warrantable. But whenever they are used, the operation of the specific should be in every respect perfect, for its partial effects are not to be depended upon; and it has appeared to me a point of the utmost consequence, to confine the use of topics, whenever it can be done, to the period above-mentioned, that the effects of the application, and the general operation of the specific may take place nearly at the same time, which should be on the second, third, or fourth day from the commencement of the decisive, general effects of the medicine, and if possible, not before.

Cure of Bubo. The management of this symptom must be regulated by its different states. In its most early stage the induration is trifling, barely tender to the touch, and the

inflammation only beginning. In the second, both the tenderness and induration are considerably increased, and the inflammation proceeding fast to the third stage, or that of suppuration. In the fourth, an opening having been made, either by art or nature, the matter is thereby discharged, and there remains an external sore, with a diseased vuide, or cavity.

In the first of these states, by leaving the original symptom (the chancre) under that discharge which naturally belongs to it, and interposing a cooling purgative now and then, during the introduction of mercury, a part of which may be rubbed in below the diseased gland, it may very frequently be prevented from increasing. And as the medicine operates on the chancre, so will it act on the induration—violent exercise, drinking, and whatever tends to increase the circulation, should be avoided, and in some cases an antiphlogistic regimen enjoined. The cure may be conducted either in the alterative method, or under confinement; the latter is generally preferable, because local irritation can be sufficiently guarded against;

and because the medicine, by producing its effects within a short space of time, will, probably with more certainty, anticipate suppuration in this method than in the alterative. If the habit will bear *Calomel. Hydrarg. calcin.* or the *Sol. Hydrarg. muriat.* the copious secretion these will produce from the glands of the intestines, will tend to unload the lymphatic system universally, and make a powerful revulsion from the inflamed part, and in many cases very properly supply the place of frictions and antiphlogistic purgatives. The date of the bubo, if that is the only symptom, or of the chancre, if it is not, must regulate the quantity and effects of the medicine. That inflammation which attends the formation of a bubo, may generally be removed as certainly by the decisive operation of mercury, as the spreading and irritability of a common chancre, probably because the inflammation is immediately dependent on venereal infection. When a lymphatic gland has been once indurated, and the disease cured by the specific, it is generally requisite to keep the system cool, and the belly open for some time, to prevent a se-

Cond enlargement. And this is more particularly necessary after a cure has been effected by frictions.

In the second state of a bubo; the inflammation and enlargement of the gland are, I will suppose, considerable: In this kind of case it is often a question, whether, when all other circumstances are equal, it is best to use mercury under confinement; or in the alterative way. In favour of the first, it may be said, that when the proper effects are produced, the medicine will frequently anticipate suppuration, and if it does not, it will diminish the enlargement so much, that the future collection of matter will rather deserve the name of a boil than a bubo. This is sometimes true. But it more frequently happens, that after a full and fair introduction of the specific under confinement, the gland, though it ceases to be inflamed, remains more or less indurated: for some time it shews no tendency to suppurate, but when, after a discontinuance of the medicine, the patient takes to his former habits of living, and uses exercise, then the gland increases, and inflames a second time, and finally proceeds to

suppuration. So that after the usual length of time spent under confinement, a new course must be commenced, and the management of a suppurated bubo attended to. Besides this accident in this state of a bubo, there is another which sometime arises in the method of cure under confinement. If a sore mouth comes on unexpectedly and prematurely, during the cure of a chancre, the first effect of the accident is to lessen the discharge from the sore, which immediately puts on the appearance of healing; this may happen when the operation of the medicine is much too partial, and long before the disease is cured, and may give rise to a bubo. From every chancre there runs a lymphatic vessel towards the nearest lymphatic gland, which vessel is the channel by which the poison is conveyed from the part infected, first to this gland, and thence into the system: when the medicine operates fully and fairly, the absorbents act so powerfully, that the venereal matter they are constantly taking up, till the sore is healed, passes through the gland, without delay, and into the blood; with which it is mixed, and ultimately changed by

the putrefactive process then going on in the system. But if, from the too partial operation of the medicine, the absorbents act too weakly, the matter may be stopped in the nearest lymphatic gland ; it there remains quiet for a short time, but at length inflammation comes on, and the tumour suppurates. I am in some doubt whether venereal matter, thus deposited in a lymphatic gland, can be removed with safety, without bringing that gland to suppuration. The most decisive effects from mercury may do it, but nothing else can.

For the above reasons, when a bubo is in the state I am now supposing, and not too much inflamed, if the spreading of the chancre or its irritability do not require absolute rest ; or if there is no other particular circumstance to render an alterative course improper, I am of opinion that a cure may be conducted under it. Exercise, the way in which the patient will probably live, if he does not confine himself, and the stimulus of the medicine, which will be introduced gradually and by moderate doses, will co-operate in bringing on a gradual suppuration, and a cure within the usual period of

an alterative course. But the same thing may be done more safely, particularly in winter, by an alterative mode of treatment, *under confinement*.

When suppuration has taken place fully, and the integuments are become thin, the matter may be discharged by a small puncture with a lancet, or by rubbing the skin with a piece of good *Lapis Infernalis* till it has produced a small eschar, not larger than a silver penny.* If the caustic is used, the eschar must be immediately divided, and the matter discharged, which may be done if the caustic acts properly without the patient feeling the lancet.

I believe that the method of leaving the eschar to slough out, without making an early division, has a tendency to produce a reabsorption of matter into the neighbouring

* This method of opening buboes I had, many years ago, from the late Mr. Spray, who had been in the habit of using it ever since the year 1747. He frequently opened abscesses in the same manner, and sometimes destroyed small encysted and scirrhus tumours, by rubbing them for a few minutes with the above caustic.—And it was to that gentleman that I owed the hint of using it to the scrotum and tunica vaginalis for the radical cure of the hydrocele.

lymphatic glands, and to enlarge them. Or, the abscess may be suffered to break of itself.

When an opening has been once made by art, or nature, nothing of the irritating kind must be applied, either to the sore or its immediate vicinity. There must be no poking after what are called sinuses, but irritation must be kept off; and the best dressing will be a soft poultice *ex farina lini*. Under this gentle treatment, if the specific is at the same time introduced properly into the habit, the parts which were before in a diseased, indurated, painful state, will subside, they will daily become less tender, and the vuide or cavity, however large, will, by degrees, fill up, and contract itself. That such has been the event from this mode of treatment, I have very frequently experienced; and, I apprehend, that the prevention of a phagedenic sore, which so often follows a bubo, depends, in a great measure, upon the smallness of the opening, and quantity of skin preserved; which, as it is the most natural, so is it, I believe, the best defence against irritation, and the best possible covering to the

diseased cavity. Large dilatation, taking away a considerable portion of skin, either by excision or caustic, have ever appeared to me, not only useless, but detrimental, by making the sore highly irritable, which, under better and more gentle treatment, would never become so.

Since writing the above, I am convinced that the best method of treating suppurating buboes is, to leave them to break of themselves—under a soft application or poultice.

When the cavity is in a manner obliterated, and healed up, there will be sometimes a difficulty in uniting a small portion of skin to the surface immediately under it. If the two surfaces are irritated with a probe, so as to cause the effusion of a few drops of blood, and assisted by pressure, a union may generally be effected. This want of union is most likely to happen when a bubo has been suffered to break of itself.

Treatment of a bubo after suppuration, when attended with considerable irritation. This subject would, perhaps, come more properly under the head of secondary symptoms than

under this. But, as it is generally the consequence of mismanaging a bubo, after suppuration, I must consider it in this place.

This state of bubo is most likely to arise in an alterative course, from the constant irritation of riding or walking, from the local application of stimulants, or from the disease still lurking in the habit. It may also arise from improper rough treatment under confinement. The effect of these causes will be to produce a hard, crude, painful sore, which, though it may be said to contract itself daily, and to put on somewhat of the natural appearance of a healing sore, yet it either does not heal at all, or does not shew a tendency to heal in a kindly manner. A soft poultice is here the best dressing. Opium may be given internally, and if the disease is not cured, frictions may be performed, both on the opposite thigh, and below the sore of that which is affected; if these have been used in the alterative way and fail, confinement, absolute rest, either with or without more powerful effects from the specific, as circumstances may direct, must be enjoined, hav.

ing always a reference to the immediate producing cause; namely, infection.

Sometimes, in consequence of venereal mischief, the lymphatic glands, after suppuration and the discharge of the contents of the abscess, remain in so diseased a state, that they must gradually subside, or melt down, before the sore can be brought into a healing state. By avoiding irritation of every kind, and trusting principally to the general effects of the medicine, what was diseased will by degrees digest off; the cavity will contract, granulate, and, at length, heal. The melting down I here mean, is a kind of secondary suppuration, which sometimes takes place in these glands, and seems analogous to the dissolution of the cellular membrane produced in an abscess, when that membrane sloughs: and therefore must be distinguished from what is, strictly speaking, phagedenic. It is frequently met with after the apertion of buboes in the alterative method, when the quantity of mercury, and its effects on the system, have been trifling; and it requires nothing but an easy dressing, rest, and

the specific continued sufficiently long to effect a cure.

The true phagedenic bubo differs very much from the preceding, and most frequently arises in a later infection: in which, besides a great irritability of habit, acquired partly from disease, and partly from the effects of the remedy too forcibly urged, or too long continued, the usual tenderness and irritability of the sore are greatly increased.

In page 68, *Treatise on Mercury*, 1782, I noted that, from the effects of mercury, when urged too far, besides a permanent degree of weakness, to a very considerable degree of general irritability, was often joined a partial one. That a phagedenic appearance from mercury would in consequence sometimes arise, behind the posterior *dentes molares*, which appearance would spread towards the uvula. If, under the same circumstances of irritability, there should be a venereal ulceration on the tonsils, which, at one period of the course, had looked well, that such ulceration also might become phagedenic. That a venereal bubo, from the same causes, might get into the same

state, the sore becoming exquisitely painful, and highly irritable, spreading from corner to corner at a great rate, eating away and undermining the surrounding skin irregularly, so as to produce an ill-looking ulceration, with ragged, callous, fiery edges. It was said that these appearances were sometimes the mere effect of mercury, but that they were also producible by the existence of a latent venereal taint, as it were roused up but not eradicated by the stimulating and putrefactive powers of the medicine.

It naturally follows from this account of a phagedenic sore, after the opening of a bubo, that the cure must be twofold—that in the case arising from the mere irritation of mercury, when it has been urged too far, or used while the patient was not in a proper state to receive it, the whole treatment must depend on quieting general and local irritability. To answer the first of these intentions, a mild, bland diet, chiefly consisting of such substances as afford good nourishment without heating the system, milk, country air, sarsaparilla, and, in some particular cases, in which the debility is great, bark, taken either

in substance, decoction, or cold infusion (as circumstances may direct) will be proper. Rest must be procured by opium, and it is evident from the late very useful experiments of Mr. Grant, that this medicine may be given in this kind of case in a much larger quantity than has been customary. The irritability of the part may also be quieted by the external application of a solution of opium in water.*

* I have sometimes found the external application of opium of use in painful sores of every kind, and particularly in the present case; but if it be considered that the quantity of opium, absorbed from a sore, is not only in proportion to the strength of the solution used, but to the extent of surface of that sore, to say nothing of the disposition to absorption, which the absorbents of the part may at one time, perhaps, have more than at another, it will be evident that not only the proper dose at each dressing, but the propriety of continuing that dose for a length of time, must be a matter of some consequence, requiring a very minute attention. The same may be said respecting the internal use of this medicine. If there is an irritability which more particularly requires its assistance at one time, or in one disease more than in another, there is also a period, in most cases, at which that irritability ceases. In the present complaint, strength generally succeeds to great irritability; and whenever that happens, after the constitution has been for a time habituated to this medicine, no injury may perhaps follow from its continuance in full doses; but when great weakness prevails,

All greasy applications seem to do hurt: I have found the best dressing to be a poultice of boiled carrots, either used alone, or with a small portion of *farina lini* to give it consistence. The effect of boiled carrots in procuring ease, in lessening the quantity, and in ameliorating the quality of the discharge from a gleetng painful sore, is very great. It is perhaps the mildest of all digestives; it immediately alters the discharge, which, from being large, thin, and acrimonious, soon becomes thick, well conditioned, and small in quantity. It will have similar good effects, even in cases truly cancerous. Its power is so extensive, that it might be applied to all irritable sores universally, with great advantage. It is not only a diminisher of local irritability, but a powerful antiseptic, and will in all

the power of habit in some measure loses its influence, and that of the medicine, in the dose originally employed, returns. In such a case, if opium is employed at all, it should be, I apprehend in the smallest, and by no means in the accustomed doses. Debility is itself a disease, often requiring a stimulus rather than a sedative; and opium is a sedative of the most powerful kind.

cases lessen, and in some take off entirely the usual fœtor of mortifications.

I have observed a very considerable difference in the effects of the boiled, and the raw root. The latter is somewhat stimulating; in cases where sloughs or mortified parts must separate, and where the local irritation is not very great, it will not only take off, or diminish the fœtor, but will cause a speedy separation of the diseased from the sound parts; that done, it ceases, in my opinion, to be of use, and the boiled root may be substituted. And a poultice formed of fine oatmeal and water, with yeast, will sometimes have a good effect. In cases of bubo I prefer the boiled carrot.

Besides the above means in phagedenic bubo, it will sometimes be of use to wash the sore with a lotion *ex aq. rosar. & calomel. vel mercur. panacea alb.* also *aq. calc. cum. calomel. &c.*

When a bubo becomes phagedenic, and the disease is not cured, the case is much more complex than the former, and more difficult of cure. The best method seems to be to correct the habit and state of the sore in the first in-

stance by the means laid down for the preceding case. After which, small doses of mercury may be gradually applied to the habit—slight frictions; or *Hydrarg. calc.* in small doses, *per se*, or with *sulph. aurat. ant. calomel.* given in the same manner, or *Solut. Hydrarg. muriat.* &c. may be employed, either singly or variously combined according to circumstances, and the cure be afterwards compleated in the usual way. If *Lues Venerea* is making its ravages in other parts of the system, as well as in one of the groins, and those ravages are likely to be of serious consequence, in that case, a mercurial ameliorant may be joined with the means recommended for taking off irritability, from the beginning. Either of the above mercurials will answer this intention, and when the vice of constitution has been by these means sufficiently mended, the specific may afterwards be more forcibly introduced for the perfect eradication of the disease.

I was desired to meet another surgeon, on the case of a gentleman who had a very large induration in one groin. It was painful, but not inflamed. My first inquiry was whether

this was a bubo as a primordium, or whether it was a tumour of any other kind affecting the lymphatic glands. Upon a minute investigation, I was informed that on that part of the glans penis close to the preputium internally, corresponding with the diseased groin, there had been a small sore, but that it had been some time healed by the application of starch, without leaving any hardness or other mark of chancre. This person had been ill some months before with abscesses in his neck, which healed with difficulty, but without mercury. His age was 55, and a free liver. My opinion was that the tumour was a venereal bubo; he had been taking some time the solution Hydrarg. mur. but it hurt his appetite, and disagreed with him. I recommended confinement, but he could not submit to it; he was anxious to go on with mercury, and used it in the way of frictions, going almost every day into the city. He continued in this plan for some weeks, taking bark for a part of the time; for his appetite failed him, and his strength was considerably diminished, and his mind was very much hurt.

Mercury caused, after some time, a considerable salivary discharge from his mouth, but without fœtor, soreness or ulceration of the gums. A part of the ointment was rubbed in below the tumour, and he went on with the frictions for six weeks, during which time no alteration took place in the tumour. Being considerably reduced, he was now advised to desist from mercury, to continue the bark, and go into the country. In a short time after going into the country inflammation took place in the tumour, it suppurated, and broke of itself—He had been desired to keep himself quiet, but he paid very little attention to this advice, and came to town with his sore in a very painful irritated state.—The result of repeated consultations was not to use mercury, but to take sarsaparilla, bark, and opium, and apply a poultice of boiled carrots to the part itself. Not finding the phagedenic appearance at all altered by this plan, I recommended the application to be changed, and substituted what I had known succeed in similar cases; dressing the sore with a powder composed of finely powdered bark, lap. calaminar. and pulv. ceruss.

with this composition the sore was dressed dry, and completely covered, and as fast as any cracks were made in what may be called the wall or covering formed by this composition, they were filled up by the powder, so that the air was as much as possible excluded from the sore. This application gave no pain.* I for some time thought it would have been of essential service, for the sore would look well in some parts, though it was spreading in others. It was never foetid, but discharged largely a thin bloody gleet; this added to his general weakness, which increased, and became at length so great that the powers of life could not be longer supported; and to my inexpressible concern he sunk. A cough came on some time before his death, and what he brought up latterly was spotted with blood—but the most extraordinary circumstance of the case was this: Three weeks before he died, to my no small astonishment, a node made its appearance on one of the tibiæ. My idea was, that though he had rubbed in

* I am indebted to Mr. Adair Hawkins for the knowledge of this very useful application.



a large quantity of mercury, yet it had not acted under the alterative course properly on the constitution and disease. It had produced, it is true, a considerable salivary discharge, but no regular sore mouth—and the appearance of the node shews clearly that the quantity of mercury, though large, had not cured the disease. The phagedenic sore still therefore might stand on a venereal basis, but in a broken shattered constitution. And the history demonstrates the bad effects of a latent *virus* in a constitution greatly debilitated.

His habit should, if possible, have been corrected in the first instance; he should have used mercury afterwards under confinement, by rubbing it through the pores of the skin only. The solution was the very worst preparation of mercury he could take, and nothing short of absolute necessity would ever have induced me to consent to an alterative course of mercury in such a constitution. But the nature of his business was such, that he could not avoid going into the city; and the exposure to air, though he went and came in a carriage, not only checked the natural operation of mer-

cury, but injured his health; added to which he was in constant anxiety to keep his complaint from his friends and relations. And this anxiety of mind is, of all the disagreeable circumstances of the disease, that which is most distressing. The disease, with proper attention, is easily cured; but the necessary concealment is excessively embarrassing, whenever it works strongly on the mind.

The following is one instance among many others, that might be adduced of a bubo appearing as a first symptom. A gentleman about 56, a very old and intimate friend, (for we had been schoolfellows) came to me much alarmed with an induration in inguine, much larger than my fist, it was extremely hard, and so painful that it was with difficulty he could walk. I told my friend I was satisfied it was a venereal bubo, that he had no time to lose, that he should confine himself immediately, and rub in mercury: he followed my directions with great steadiness. A part of the ointment he rubbed in below the induration, and occasionally through the course he took *Calomel* *pp. gr. ii. omni nocte*. His mouth was soon affected properly; that affection was

kept up for some weeks, and it was pleasing to see how the tumour gradually diminished as the process went on, till it at length disappeared. No symptom has since arisen.

I do not mean to say there are no swellings of the lymphatic glands in the groins of a scrophulous kind. But, if I may judge from my own experience, the greater part of these cases in adults stand on a venereal basis. There are no doubt many such in scrophulous habits—and some may be truly scrophulous.

Having elsewhere in this work sufficiently described another very irritable species of sore arising from a bubo, in which the lymphatic glands remain hard or otherwise diseased, and considered it as a consequence of mismanagement, I must, in this place, mention what appears to me the most probable means of prevention, and of curing it when it has actually taken place. With respect to prevention, that will depend on the care taken to avoid, as much as possible, irritation of every kind whether applied to the part or the system. The habit of the patient, the method of employing mercury for his cure, the effect of that medicine on the

constitution, and, in short, the whole treatment of the bubo, from simple enlargement to supuration, and from apertion to the filling up of the cavity, are all to be attended to, and the case conducted according to the gentle method I have laid down. If that is followed, I believe a phagedenic sore would very seldom, and one of the kind I am now considering never happen.

If, however, a case of this kind has taken place, the diseased glands within the cavity of the abscess will be simply in a state of irritation, and enlarged; or else one, or more of them, having passed this stage, will have suffered a sloughing of their external coats or coverings, the body of each gland sprouting up in the form of an almost insensible fungus, with a surrounding sore, highly irritable and painful.

In the first of these two states, all the means recommended for the cure of a phagedenic bubo, dependent simply on local and general irritation, must be applied. By these the tumefied parts will subside, the coats of such glands as still remain entire will granulate, the whole sore will contract, and finally heal. I mean, if the dis-

ease be cured by the specific. And if it is not, the treatment must be a mixed one. But irritation must at all events be quieted in the first instance.

If the coat of a gland sloughs, there being nothing now left to limit the expansion of its spongy body, the latter may shoot out in the form of a fungus, which is very little sensible, though the enlarged gland, whilst its covering remained entire, was perhaps exquisitely so.

The methods recommended for the extirpation of the fungus are the knife, ligature, or caustic. Of these, the latter appears to me most unexceptionable, provided the application used be a proper one; and the surrounding very irritable parts are carefully defended with lint, whilst the fungus is touched with the caustic.

The caustic employed in this case should be of a particular kind. The *lapis infernalis* will irritate too much, and, in spite of the care taken to guard the neighbouring parts from its action, they will, perhaps, suffer. The lunar caustic not only irritates too much, but it does not act with sufficient power. Besides, the

application employed (as was before observed) should be of a particular kind. It should, if possible, have one property which neither of the others possess. It should be capable of effecting the destruction of the part diseased, with the least possible degree of pain; and, if it could be done, of acting principally by its sedative power. Many years ago, I had a boy under my care for a large, lax, fungous kind of excrecence on his chin, which I mortified by the application of a concentrated solution of *sacchar. saturni* in water, and I had no further trouble with it. The part acted upon by the sedative separated, and the sore healed very kindly. From this instance, it is plain, that, though in a diluted state, this medicine is an astringent sedative, yet, when concentrated or crude, it is a kind of caustic. From such an application I should expect a great deal, it might be used with bread, without oil or animal fat, in the form of a poultice. The parts which are the most sensible it could not injure.—Those which are diseased, in a manner insensible, and almost out of the laws of the circulation,

it may by its sedative power, probably shrink and mortify.

Nor is this the only medicine which is applicable to the present case. It is well known, that *pulv. sabin.* is very commonly used for the destruction of verrucæ. What are the effects it produces? On the surrounding sound parts it causes slight excoriation rather than ulceration, on the excrescences themselves it acts more powerfully, causing them to moulder away. There is a something in the sound parts which keeps them from loss of substance; there is a want of *vis vitæ*, a sponginess, or a something in the verrucæ, which make this medicine cause the complete destruction of them, without doing the like injury to the surrounding parts, though these are both sensible and irritable. And what is extraordinary, these effects it produces with very little pain, and the parts irritated remain cool, and generally without inflammation.

What has been said respecting the properties of the above medicines will apply in some measure to the cuprum vitriol. It has been for

ages in use, as a means of destroying the fungus arising in sores of all kinds. In its crude state it is a slight caustic, from the intensity of its astringent and sedative properties. In a weak solution with water, it is a very gentle and powerful astringent sedative, it represses profuse discharges of all kinds, even when they arise from the cavities of joints; it is antiseptic; and a diminisher of irritability, not only when used externally, but when employed internally; it has none of the deleterious qualities of lead, and therefore may be applied with perfect safety for the destruction of the fungus above described; and, I should hope, in preference to every other method.

How far either of these applications may be used with propriety to some cancerous sores, which do not admit of extirpation by the knife, may be perhaps worth an inquiry.

Venereal Eruption. Fortunately for the cure of this symptom topics are of no avail, and therefore the general effects of the medicine alone have been relied on.

As the disease has now gained its acmè, and shewed itself by pustules on one surface,

namely, the skin, between which and other surfaces, namely the tonsils and periosteum, &c. there is an evident consent, the transition of infection from one to the other being extremely easy, and, as at this period, the living power itself seems to be universally diseased, from the disposition to metastasis which now prevails, so it will be more particularly necessary that the operation of the specific should be in every respect perfect; the practitioner neither trusting *solely* to the largest quantity, nor to any effects of the medicine, when unsupported by a proper accumulation. When the situation of the patient does not render an alterative course more eligible than the method under confinement, the latter will be always preferable. In both methods the accumulation of the medicine must be a large one, and its general effects proportionably great. In both, towards the latter part of the course, the external, as well as internal changes, so often mentioned, should be raised. In the alterative method these may be made to take place without salivation, but under confinement (when idiosyncrasy does not resist) after about one half of the medicine ge-

nerally found necessary to cure a secondary symptom has been fairly introduced, an increased secretion of saliva, and affection of the whole mouth are rather to be aimed at than avoided. Whether it be that the increased flow of saliva, cleanses the lymphatic system (which not only receives, but probably retains the seeds of infection throughout the whole progress of the disease) more completely than any other secretion, I will not say, but the truth undoubtedly is, that a cure not only takes place with more certainty after a sufficient accumulation of mercury, when the mouth is fully affected, but the deleterious effects of the medicine subside the sooner, in consequence of this affection; the salivary discharge being an appendage to the sore mouth, and nature's remedy for taking it off.

How far the warm bath, sudorifics, or purgatives may be necessary to take off the stimulating effects of mercury, when salivation is wanting or defective, is another question.— And though I cannot allow a determination of the circulation to the other emunctories, to add any thing to the antivenereal effect of mercury,

only in as far as such determination may increase the general accumulation during the progress of a cure ; yet both sweating and purging, in proportion as they evacuate from the lymphatic system, may, perhaps, tend to lessen the stimulating effects of this medicine after such course has been completed. But I believe that the increased secretion from the glands of the mouth, as it seems to be the most natural, so is it probably the most effectual way of fulfilling this intention.

What has been said on the general operation of mercury in the former part of this work, tends to prove that, in ordinary salivation, a just balance must be preserved between the stimulating, the putrefactive, and evacuant effects of the medicine. If this, in the vast variety of cases to be met with, could generally be done, there would be little doubt, but that in a symptom, like the present, ordinary salivation would be preferable to every other method. But the fact is, that salivation, even under the most careful treatment, cannot always be kept within proper bounds.—It has, therefore, been my aim to give to the course under confinement, which

I have ventured to recommend, the inactivity, the rest, and exclusion from the external atmosphere, of ordinary salivation; to give it also, what the latter is too often defective in, a full and fair accumulation; and having so done, to produce the very important putrefactive and evacuant effects of the medicine. A method, as I conceive, more within the controul of every one than ordinary salivation, *more easily graduated to the cure of every symptom*, and, I should hope, generally speaking, more certain in its operation. Experience obliges me to add, that, in the application of this method to a venereal eruption, not only the stimulating and putrefactive effects, but a fair and unequivocal general affection of the mouth, with a corresponding salivary discharge, should be produced. I mean in all those cases in which idiosyncrasy does not otherwise determine the matter. Besides the immense advantage which this secretion is of, as an evacuant, and natural means of taking off the stimulating effects of the medicine, I must observe that when an eruption has once appeared, the disposition to metastasis prevails universally over

the whole system; and if the operation of the medicine is incomplete, or partial, not only an affection of the periosteum, but an ozæna, or total deprivation of sight, &c. may be the consequences.

Nor are the effects of mercury, when salivation is suppressed, to be treated lightly. In the third volume of the London Medical Observations there is a very useful paper on this subject by the late Dr. Silvester. The case of the Girl in whose stomach so great a degree of irritability was produced by the sudden check put to salivation, that this organ could retain neither fluids nor medicines of any kind, for some months, is a very remarkable one. It was cured by reproducing this increased secretion. I have lately seen a vomiting and similar irritability brought on by exposure to cold, during the use of Plummer's pill, though the patient had only taken it for a few days, and in the smallest doses; which symptoms ceased upon the coming on of a plentiful salivation. And it is the only instance I have met with of this effect from this preparation of mercury. These symptoms were occasioned by getting

out of bed in a cold night and checking perspiration. I suspect that not only great irritability of habit, ending in hectic, but many of our palsies are also to be attributed to the suppression of this secretion. I knew two instances, one was in salivation, the other in an alterative course, in which the application of cold produced palsy, but the patients recovered.

In the first the palsy was produced by only going from his bed room, where he had been confined, to a drawing-room where there was no fire, in winter, when snow was upon the ground: in the second the same mischief was occasioned by going a hundred miles in a post-coach, also in winter.

With respect to the method above recommended, and its application to a venereal eruption, the time of cure will greatly depend on the effects of the medicine, as well as on the obstinacy of the disease. The sooner the affection of the mouth comes on, the shorter will this time be; the nearer it will approach to ordinary salivation, and of course the less will be the quantity of mercury employed. On the other hand, when a week, a fortnight,

or more are spent, before the mouth becomes touched from the accumulation of the medicine, the longer will the time of treatment be, and the nearer will the method come to that described under the name of alterative; but be the accumulation early or late, little or much, we apprehend that, in many cases, security cannot be given to the patient, without the production of the most clear and decisive effects from the medicine; nor when salivation unavoidably comes on, as one of them, without that affection being considerable. The factor should be great, the parts within the mouth should be here and there superficially sloughed, the cheeks and lips somewhat tumid; the salivary glands secreting plentifully till the mouth is with overflowing full; and in proportion to these external marks, so will the general effect of the medicine be internally, in producing that species of attenuation or putrefaction *sui generis*, which universally prevails in every course in which a cure is effected, whether by salivation, as it is commonly called, by the method above recommended, or by an alterative one. And if the two former of

these methods are preferable to the latter, which they certainly are in most of the worst cases of the disease, it is because the operation of the medicine is more complete and less partial in them than in the alterative.

When I say so much, let me not be misunderstood: I mean only to call the reader's attention to the fact, that the antivenereal power of such effects as these under confinement, when they follow a sufficiently large accumulation, are too striking, and too well known to need a comment.

Under the general name of salivation, they have been uniformly produced, from the days of Barengareus Carpus to the present time, and employed as means of cure, in the very worst cases, by a prodigious number of the most able practitioners throughout Europe, by Vigo, Fallopius, Sydenham, Boerhaave, Astruc, and a great many other respectable characters. And they are the effects which many of the first physicians and surgeons in this, as well as some other countries, are still obliged to have recourse to. If a less and more partial operation from mercury will suffice, why do the gentlemen

who have the conduct of venereal patients in the great hospitals of this town, still find themselves under the necessity of producing these effects? The reason is plain. Experience, that great touchstone of truth, every day shews them in a great variety of instances, that nothing short of these effects can be depended upon, for the cure of the worst and more advanced stages of the disease.

With respect to the internal changes of which salivation is the general type, enough has been elsewhere said to shew that these, whether the secretion of saliva be slight or considerable, are indispensable, and should be always produced, when the intention is to conquer an obstinate, primary or late symptom. Having very fully shewn the connection between this secretion and those internal changes, I need not enlarge further on this head; but shall only observe, that the effects of the medicine, and secretion of saliva, be they little or much, should be suffered to go off spontaneously; and, in my opinion, should not be checked, either by purging, exposure to air, or other means. It was a rule with Dr. Syden-

ham to give *mercur. dulc.* once a week for some months, upon the patient's going out and taking to his former habits, after the cure of a confirmed *Lues*. I do not know precisely, whether a subsequent use of mercury may not be sometimes necessary. In some of the worst cases, however, I have trusted to the above general effects of the medicine alone, without any after treatment, neither using the saline preparations of mercury, nor sarsaparilla. A subsequent mercurial course, as it must be conducted in the alterative way, may be hurtful to the constitution, and unless it affects the mouth a second time, its effects, as an antivenereal, have generally appeared to me doubtful; and I believe, if the more efficacious original process be properly conducted, that this will be very seldom necessary. If, however, the further use of mercury should, from the particular obstinacy of any one symptom, be thought advisable, the solution, or *Ward's drop*, may be given, largely diluted, either alone or joined with sarsaparilla. After the cure of a venereal eruption, or venereal sore throat, perhaps this last medicine may be

particularly useful in obviating a nodous affection; or other preparations of mercury for internal use may be employed, such as *hydrarg. calc.* or *hydrarg. vitriol.* in very small doses. In an alterative method of cure, if any one or more pustules continue on the skin, notwithstanding the free use of mercury, the latter should be generally employed, not only till such pustules produce pits, as in the natural small-pox; but till the parts pitted become nearly of the same colour as the skin. Under confinement, when the effects of the specific are complete, the pitting should be evident, but it is not necessary that the medicine should be urged till the parts recover their natural colour.

Neglected Chancre. (Vide Vol. I.)

The irritability, hardness, size, and date of this symptom must in some measure determine the quantity and effects of the medicine, as well as the method of cure. The course under confinement, recommended for the second stage of a recent chancre, and the alterative, which was also applied to that period

of the disease, will often effect a cure. The former is however preferable. If either of these methods fail, the medicine must be urged to the point mentioned in the treatment of a recent venereal eruption; for the callosity must be dissolved, if possible, by the general operation of the specific alone. To assist which it may however be sometimes advisable to apply a mercurial to the part—*Hydrarg. axung. porcin. extinct.* is a good medicine for this purpose, or the vapour of mercury may be used, detached by means of heat from sulphur. Astringent sedatives will be hurtful, but if the whole of the hardness can be safely destroyed (after waiting for the general effects of the specific) by cathæretics, they will be sometimes useful: *Hydrarg. nitrat. rub.* or *Argent. nitrat.* will answer this intention, but the first is the best application.

Neglected Bubo.

The treatment of this symptom may be easily understood from what has been said on the cure of the different states of bubo in the foregoing division. And as in the preceding

symptom, if milder methods fail, those which are more powerful must be had recourse to. I do not however consider this case as phagedenic, or attended with great irritation; but suppose that the continuance and obstinacy of the sore arises principally from the disease having been palliated, but not cured; and therefore the means of relief must be sought for rather in the general than local operation of mercury. To assist the general application of the remedy, however, it is sometimes necessary to use the *cerat. mercur. R. solut. mitis. argent. nitrat. in aq. fontan. &c.* merely as promoters of sound and healthy granulations. And cataplasms of *farinæ lini* will be found an easy application over other dressings.

Verrucæ.

These excrescences may be easily destroyed with *pulv. sabin. rec. pulveriz.*—Mercury will frequently remove them, not only when the usual effects of it are produced in the system by its general operation; but also when used locally.

There is often no small degree of judgment

required to determine when they are to be treated as venereal, and when not. When, as appendages to the disease, they require the general operation of the medicine: and when they continue in consequence of an injury having been done to the parts on which they appear, after the disease, which originally produced them, is cured. But be they small or large (and they are sometimes of a prodigious size) I can safely say, from experience, that *pulv. sabin.* properly applied, and steadily used, will cause them to moulder away. Having always found that this answered the purpose, without producing either much pain or irritation on the parts, I say nothing of other means which have been employed for the same purpose, namely, *Vitriol. cærul. ol. vitrioli*—*aq. diabolica*, or the knife, believing that these can hardly ever be necessary. But these observations are only applicable to the local treatment. When they arise, either alone, as appendages to a smothered pox, or in combination with other symptoms, undoubtedly venereal, the cure of the disease must be effected by general means; and as they are

then most frequently late symptoms, they require the most decisive effects from the remedy.

The red, spongy, fungous Verruca.

This may easily be destroyed by a touch or two with the *argent. nitrat.*—and the general treatment should be as in the preceding case.—But in both cases, the local treatment should be deferred to the second, third, or fourth day, from the commencement of the decisive effects of the specific, that there may be a co-operation in the general and topical treatment; soft dry lint even here may be the best topic, for the fungus will frequently shrink under the general treatment.

The large irregular Condylomata, of the Anus, by whatever name they may be distinguished, as *cristæ*, *fici*, &c. generally give way to a full and fair operation from the general remedy. The local treatment (when necessary) stands upon the same basis as that for the foregoing symptoms; and it should be, in my opinion, conducted in the same manner;

and the specific employed as for a recent venereal eruption, compared with which, the latter are late symptoms. And as the other secondary symptoms, mentioned in the second division of the natural history, require from the specific no general means of relief distinct from those recommended for a venereal eruption, I shall run them over briefly, noting, however, certain peculiarities in each, which often demand a mixed, and more complex treatment.

Venereal ulceration of the tonsils.

This should be accurately distinguished from all other affections of the same parts. What has been said, when speaking of this symptom in the preceding part of the work, will be sufficient, I hope, to enable any one to discriminate it from a common putrid sore throat. But I am convinced that these bodies are not only liable, like a venereal bubo, to become phagedenic; in which case the general treatment must be the same as in that complaint; but from the action of mercury locally and partially on these glands, a sloughi-

ness sometimes takes place which ends in their total dissolution. This I have seen, where salivation (taking the term in its common acceptation) could not be raised, though the quantity of mercury used was large; and have also seen it in many alterative courses, in which the tendency to salivation has been suppressed.—Great judgment is sometimes required to distinguish this from a venereal sore throat: the true venereal ulceration may be compared to lard or rusty bacon half melted, with ulceration or excavation; the mercurial affection has the appearance of a common slough. It is attended with the fœtor of mercury, the sloughs are sometimes ash-coloured, with a disposition to salivary secretion; the proper remedies for this are bark, wine, opium, antiseptics to the part, and frequent gargling with the muriatic acid, largely lowered with water, as thirty drops of the acid to half a pint of water. When the ulceration is clearly venereal, and spreading with rapidity towards the uvula, relief must be applied as soon as possible; for if this part is destroyed, an incurable defect in the voice will remain ever after. In such a case, a cin-

nabar fumigation may be occasionally employed as an assistant to the general means of cure. But, if from the irritability of the patient's lungs, or his seeming tendency to hectic, this medicine should be judged not to be perfectly safe, some other mild mercurial, in the form of a gargle, may be used. I prefer these to all applications of the astringent sedative kind. But if the ulceration, though venereal, is not spreading with great rapidity, the general means of relief may be the same as for a venereal eruption, and employed without the aid of any topic—till the ulceration heals, and the disease is cured. And the same mode of treatment is applicable to the indurated, horny kind of venereal affection of the tonsils. The common astringent sedatives will be particularly hurtful in this case. The induration will probably give way to the general action of the specific alone, but if it should not, a mercurial topic may be used, under certain restrictions. When the ulceration is spreading at a great rate, the doses of the medicine should be large, and, I am of opinion, that the production of ordinary salivation should, in that case, be risqued. Should that take place, the

cure must be conducted with the precautions formerly mentioned.

Venereal sores of the skin, ulcerations on the posterior part of the œsophagus, and of the tongue or cheeks, are curable by the same general means as the foregoing, and to these symptoms, mercurial topics are, sometimes, though rarely, necessary.*

Venereal Ophthalmia.

The first intention towards the removal of this symptom is to lower the increased circulation in the vessels of the part and of the system, if that be also necessary. Bleeding from the arm will effect the latter; and the application of leeches to the temples, the former: but as a vast deal depends on the speedy removal of the metastasis, which gives rise to this symptom, cupping between the shoulders will in many cases be preferable to bleeding from the arm, as being more powerfully revulsive; and it may perhaps, in some

* I remember to have seen a venereal sore of the skin so highly irritable that the patient experienced excruciating pain, whenever it was dressed; this ceased upon the system and mouth being properly affected with mercury.

cases very properly supply the place of leeches. Blistering may follow immediately upon lowering the circulation; and a brisk mercurial, or other purgative be given on the following morning; and on the subsequent night the patient may rub in. This symptom sometimes appears under an acute, and sometimes under a chronic form. In the former case, a more free use of evacuants is required than in the latter; but even in this, they are often necessary, both to lessen the local turgescence of the vessels of the eye, and as a security, that the stimulating effects of mercury may act with safety, without increasing the circulation too much. The eye itself should be kept from the light till the inflammation is gone; and the safest way will be to confine the patient in bed, and in total darkness, by covering both eyes. As a topic, tepid water may be applied with a sponge. I am in some doubt, whether *Hydrarg. axung. porcin. ext.* would not be a good application in this case. The blister should be kept open, and the specific daily pushed on with as much expedition as possible, till a very considerable amendment takes

place; the proper accumulation may be afterwards completed more leisurely, and the effects carried to the point recommended for a venereal eruption. But in this case, as well as in a spreading ulceration of the tonsils, when the defluxion on the eye is considerable, the specific must be introduced in full doses, and the production of salivation risked. And this conduct will be more particularly necessary, if the ophthalmia is attended either with a partial or total deprivation of sight; for the progress of this symptom cannot be checked too early; and it may happen that no quantity, nor any effect of mercury, short of a fair and full affection of the mouth, will answer this purpose.

Venereal Sarcocoele.

This kind of enlargement is generally pyriform. It is curable by the same mercurial process as the preceding symptom; but it has been usual to employ a portion of the ointment to the part itself, or to the spermatic process. The general operation of the specific will however cure without this

local treatment, as I have seen in many instances. If used prematurely, it may produce a metastasis of the disease to some other part; that part may be the eyes, the periosteum, or the root of the nose. It should therefore be employed rather towards the end of the course than throughout its whole progress. When a large quantity of the specific has been, for a length of time, used locally, and the tumour has been removed by the joint operation of the general and local treatment, I think I have sometimes found that the testicle has been left somewhat diminished in its natural size; probably from the stimulus of the medicine having produced a too strong action in the absorbents of the part. Both testicles should be properly suspended by a bag-truss, during the cure. I remember an instance of a man having this symptom on both sides, who was cured within the space of three days, by the coming on of an unexpected salivation, from so small a quantity of mercury as is contained in *Ung. Hydrarg. fort.* ʒj. and *calomel* gr. ij.

Rhagades.

The treatment of this symptom must be the same as for a venereal eruption.

Eruption and Nodes.

These being synchronous, and for the most part readily transmutable the one to the other, I shall consider them as having a very close natural connection.

The treatment of a late venereal eruption should be nearly the same as for the recent one, formerly mentioned. But as the disease, from the length of time it has now subsisted, may reasonably be supposed to have vitiated the lymphatic and other parts of the system more thoroughly than in that, the propriety of employing an after treatment in the alterative way, as the most likely means of obviating a return of the disease, seems to be more evident. When the original process has been properly conducted, I have frequently (as has been already observed) relied upon that alone; and I believe that nothing more is, generally speaking, necessary. Venereal ophthalmiæ,

nodes, ulcerated tonsils, and several other of the most rebellious secondary symptoms, have I cured myself, and seen cured by others, without any subsequent use of mercury, and that when the course has been completed within three weeks or a month: but as relapses do sometimes happen under the best treatment, particularly in old poxes, when the disease has by time become intimately blended, and, as it were, rooted into the constitution, if there is no circumstance in the habit that renders the further use of mercury unsafe, particularly if the season of the year be also favourable; in that case, small doses of *Hydrarg. calc. solut. Hyd. muriat. Ward's drop, or Pil. plummer.* may be given for a few weeks, *cum decoct. sarsæ.*

The propriety of employing the above treatment must often depend upon the kind of course which has been adopted for the cure of the disease; or which may have taken place through accident. If the patient has been cured by a process approaching nearly to that of ordinary salivation, in which the time of cure has been short, and the quantity of medicine used small,

a subsequent alterative course may be more particularly necessary : but when the original process has approached somewhat to the nature of an alterative course, in which the time of cure under confinement has taken up four, five, six or seven weeks ; and the quantity of mercury has been large, the decisive effects taking place towards the latter part of it, this kind of practice seems to be much less necessary ; because every advantage, in such a course, has been obtained from the long continued stimulus of the medicine, as well as from its putrefactive effects. And it will be still less necessary, if during so long a course the more active saline preparations of mercury have been had recourse to, in aid of frictions. What has been now said will apply to some of the preceding secondary symptoms, as well as to those, the cure of which I am about to mention. When I lay so great a stress, and place such entire confidence on what I have called the decisive effects of mercury, as to suppose a subsequent alterative course needless, I do not consider them as new discoveries. Some practitioners of the present day may, if they please, doubt whether

they should be received as leading principles of practice, or not; but it may be some satisfaction to the reader to be informed, that so far back as the beginning and middle of the sixteenth century, reiterated experience had, even then, gone a great way towards establishing their validity. Vigo cured the disease by making the breath fœtid, and the mouth sore. * But Nicholas Massa, who was for many years in great repute at Venice, and claimed the discovery of the red præcipitate, the invention of which had been attributed to Vigo, enters much more fully into this matter. That lassitude, or (as he has expressed it) that half

* “ Postea æger, ut supra, purgationibus purgatus, ungat
“ seipsum, &, si potest, juncturas post cœnam per tres ho-
“ ras, & sit ante focum, et cubile sit clausum, & incipiat
“ à juncturis claviculæ pedum, postea ad genua deve-
“ niat, deinde cubitos ungat, postremo juncturas manus,
“ & si virus est fortis, & ægritudo magna, unge etiam
“ juncturas inguinum, ancharum, & spatularum. Postea
“ juncturæ stupa canapina calida cooperiantur, et ligen-
“ tur, et ingrediatur lectum, cooperiaturque coopertoriis,
“ ut sudet per duas horas; quod si per sudorem nimiam
“ patiatur lassitudinem, detur cyathus unus brodii galli-
“ næ, vel carnis. Et sic procedere oportet ungendo sin-
“ gulo vespere usquequo medicus videat exitum mani-
“ festum materiæ phlegmaticæ ab ore, aut fluxum ventris

swooning lassitude, which marked, in his cases, the ultimate action of this medicine, when no affection of the mouth took place, is particu-

“ notabilem, vel sudorem, et ultra hoc videat diminu-
 “ tionem manifestam (si sunt pustulæ) pustularum (&
 “ si sunt dolores) dolorum mitigationem (& si aposte-
 “ ma) resolutionem ipsorum (& si ulcera) digestionem,
 “ mundificationem, incarnationem, et cicatrizationem.
 “ Et quoniam sæpissime accidit quod in aliquibus nullus
 “ apparet fluxus materie ab ore, neque aliqua alteratio,
 “ sive dolor dentium, neque fluxus ventris, aut aliquod
 “ signum evacuationis manifestæ, etsi ægritudo sit mate-
 “ rialis quæ sanatur evacuatione, dubitat medicus, nes-
 “ ciens se regulare, de quantitate unctionis, et dierum
 “ numero, quæ sint sufficientes in cura, ut sanetur æger.
 “ Et ego multos annos in hac ambiguitate fui, usquequo
 “ cognovi, quod in istis ungendo procedere oportet usque
 “ ad aliquam manifestam pustularum, dolorum, aposte-
 “ matum, et ulcerum sanationem, et virtutis tolerantiam
 “ quod signum est mihi infallibile, & maxime quando ac-
 “ cidunt lassitudines quædam syncopales, ultra dicta; &
 “ tunc est judicium quod virtus agit circa materiam, sive
 “ humiditatem bonam, in qua humiditate reservatur calor
 “ naturalis, et cum hoc apparet, dimitte unctiones, et
 “ conforta virtutem cum cibariis bonis, ut sint ova sorbi-
 “ lia, contusa ex pulpis gallinarum, et caponum, et cum
 “ vino aromatico, et aliis bene nutrientibus. Et ita ego
 “ multos sanavi, qui ab aliis sæpe inuncti, non fuerunt
 “ sanati, eo quia nullam alterationem oris, cum evacu-
 “ atione faciebant unctiones, et medentes non cognos-
 “ cebant quando perfecta erat eradicatio materiæ, quæ

larly worthy of attention. I was for many years under the same difficulty and uncertainty as this able practitioner, till repeated observation, in a great number of instances, clearly shewed me the same fact ; and I do repeat that this is the precise point to which we must often carry the effects of the medicine if we mean to cure the disease.

“ quoniam non fuerunt eradicatæ, iterum morbus deterior
“ priore recidivabat. Sed ut melius me intelligas ego
“ procedo in istis cum unctione usque ad lassitudinem dic-
“ tam semisyncopalem. Sanavi inter alios unum (qui à
“ pluribus jam fuerat inunctus, et non sanatus) quem per
“ triginta septem dies inunxi, et liberatus fuit, et nun-
“ quam recidivavit, et ab omnibus incurabilis dicebatur,
“ et sanus adhuc vivit, et multos alios, ut dixi signumque
“ fuit mihi ut supra. Quare dico quod non potest dari
“ certa regula de numero dierum unctionis, et quantitate,
“ sed oportet procedere secundum fortitudinem patientis
“ cum iudicio bono existimativo. Sanavi etiam multos
“ marasmos debiles cum ægritudine magna per plures re-
“ iterationes unctionum, et ungebam per quatuor dies
“ omni vespere, deinde dimittebam ipsos per hebdoma-
“ dam quiescere sine unctione, sed cum bono regimine, et
“ postea iterum ungebam per quinque dies vespere secun-
“ dum eorum virtutes, iterumque dimittebam quiescere,
“ et sic sanitati restitui sunt. Vidi etiam in aliquo virtu-
“ tem debilem, et dolores acutissimos indigentes maxima
“ unctione, et feci ungere per quatuor aut quinque dies,
“ usque quo dolores fuerunt mitigati, postea per mensem

Whether the nodus affection be hard or soft, diffused or circumscribed, the general treatment must be the same as for a late eruption. It has been usual in these as well as in some other cases to use the specific locally, that the induration or enlargement may be the more ef-

“ feci ipsum bonis cibariis nutriri et iterum inunxi per
 “ multos dies, et sic sanatus fuit. Tua ergo erit secun-
 “ dum ægritudinem, et virtutem cum istis mitius, et for-
 “ tius ungere, continue, et interpolatim, cave tamen ne
 “ pectoris partes inungas, ut docet Avicenna. Æger ta-
 “ men cum bonis cibariis semper nutriatur, et cum vino
 “ optimo, non vinoso, sed mediocri, et inter prandium
 “ et cœnam da scutellam brodii, semperque attende vir-
 “ tuti, et ægritudini, et omnino à ventis, et ab aëre fri-
 “ gido patiens abstineat læteturque. Et quando apparet
 “ fluxus humiditatum manifestus ab ore, cum dolore, et in-
 “ flatione gingivarum, et accidentia morbi remittuntur,
 “ ab unctionibus cessare oportet, et removere stupas coope-
 “ rientes juncturas. Neque levare oportet loca inuncta,
 “ nisi ex nimia resolutione ægro syncope accadat, aut subi-
 “ ta, et magna oris ulceratio præfocativa, vel fluxus ven-
 “ tris cum excoriatione intestinorum, vel aliquod aliud ac-
 “ cidens, quæ si accidunt, remove unguenta, et stupas,
 “ quod si ex toto quæris abscindere virtutem unguenti, ne
 “ ultra procedat, juncturas lavabis, locaque alia, ubi cum
 “ dicto unguento illinitum fuit cum *vino calido simplici*, vel
 “ in quo *chamomelam* ebullire feceris, aut *salviam*, suc-
 “ curreque ad accidentia cum remediis infra scribendis.”

Vide *Aphrodis. Nich. Mass.*

fectually dissolved. To this I have no objection, provided the general operation of the medicine is to precede the local application of it, and the two modes of using it are allowed to co-operate during the production of the decisive internal changes : but it has generally happened to me that the latter alone have been fully sufficient for the cure. The induration which generally occurs in this symptom is, for the most part, owing to a thickened periosteum, and gives way to the usual effects of the medicine ; and what is remarkable, even when the subjacent bone seems to have suffered, the same effects will often operate so effectually on the part as to render an external opening and exfoliation unnecessary. But if any one or more bones should become carious, the cure of the disease is to be in the first instance effected ; after which the separation of the caries is to be promoted by a general attention to the habit of the patient, in order that nature may be the better enabled to throw off the diseased from the sound parts. Country air, a well regulated diet, bark, and sarsaparilla will be useful. The cure of this *symptom* by mercury stands on the

basis of every other obstinate secondary symptom, and when that has been effected, the medicine ceases to be a specific, and should be discontinued. The efficacy of sarsaparilla in Lues Venerea has, by some medical persons, been doubted. Even Fallopius, who strongly recommends it in one part of his works for nodes, in another seems rather to have used it for the relief of particular symptoms, than for the actual cure of the disease. After describing the root, and shewing its resemblance to the *Smilax Aspera* of Dioscorides, he says : “ Imbecillior est certe ligno (meaning guaiacum) habet tamen ipsa nobiles vires, quibus superat guaiacum ; et est quod si post superatum Gallicum restent ulcera, Rhagades circa se- dem, duplo citius sanat hæc, quam Lignum Indicum.” He then goes on to describe briefly two cases; in one of which there were tophi or nodes on the feet, and tibiæ, equal in hardness to bone, which were, in a short time, dispersed by the use of this medicine : in the other there were tumours on the head, and gummata, which were removed by the same means within ten days, and he adds : “ Cum

“ ergo in Gallico adsunt ulcera ad hoc medicamentum confugio, tanquam ad certissimum, et tutissimum auxilium ; et si non facit prima diæta, facit saltem secunda vel tertia. Præstans est guaiacum, tamen ego utor salsa in levibus. Soleo etiam miscere hæc duo simul.”

It has generally been the custom to join this root in the cure of Lues Venerea with the specific: and this circumstance has prevented us from speaking with certainty as to its antivenereal power. As a matter deserving future inquiry, I shall only observe, that the disease, when it affects the periosteum and bones, may possibly be mitigated, if not permanently relieved by the use of this medicine. If it had not been discovered that the colouring juice of *rad. rubra tinct.* would actually make the bones of an animal, who is fed with it, red, it would not have been believed that such a thing were possible. Sarsaparilla is not endowed with the same colouring property, but it is not very unlike it as a root ; and it does not follow, because it cannot be demonstrated, that water impregnated with this medicine, circulates

through the bones, that therefore it has no effect whatever upon them. I cannot prove it; but I am strongly inclined to believe that it will be found very useful in this and the other late stages of the disease. It must however be confessed, that neither the ancient nor modern proofs of its efficacy are so satisfactory as might be wished.

But there is another medicine which has, of late years, been too much neglected, the power of which is supported by more substantial documents. The medicine I mean is Guaiacum, not to mention the authority of * Boerhaave, Nicolaus Massa has left us three very clear and striking instances of its efficacy; and that, in habits by no means favourable to the stimulating effects of this medicine. The cases he describes were of long standing, of the date of many years,

* This writer speaking of the virtues of Guaiacum, in his preface to the Venetian Collection of Authors, says:
 “ Reminiscor lætus, quod juvenem sanaverim jam sanissimum virum et patremfamilias, cui diversis corporis locis
 “ ossis tabefacta adeo, ut in digito manus articulus unus ex-
 “ ciderit, in crure plurima loca cariosa spectarentur. Hac
 “ methodo rite exculsa, atque observata, ossicula narium,
 “ fragmenta palati, separata, cætera sincera reliquerunt.”

and if a tent which was employed in the third case was not the sole cause of keeping the ulceration at the upper part of the trachea arteria open, they were all of them undoubtedly venereal. They are so curious, and the treatment of them was so much less severe than that recommended by some of the writers who have been advocates for the use of Guaiacum, that I hope I shall be excused if I give them, without mutilation, in the words of the author.*

* *Case 1.* “ Primumque scribam quæ contigerint strenuo
“ Viro Domino Francisco de Placentiis, Civi et Nobili Cre-
“ mensi, qui tum esset temperaturæ calidæ et siccæ, ætatis
“ supra triginta annos, vir plurimorum laborum, incidit
“ tandem in morbum Gallicum, qui nullis unquam auxiliis
“ medicorum tam purgantibus quam alterantibus potuit
“ liberari, sed per multos annos infelicem vitam ducebat.
“ Nam cum esset ex proprio temperamento corpus gracile,
“ ex diuturno morbo gracilior factus, me convenit, narravit-
“ que plurima, quæ ipsum die noctuque molestabant, inter
“ quæ erant dolorus in omnibus articulis, et musculis
“ membrorum, præsertim in parte anteriori capitis :
“ aderant quin etiam tumores duri non solum in capite, sed
“ in pectore, brachiis, et cruribus, ex quibus quidam
“ exulcerati erant ; cumque strenuum, et nobilem militem
“ audivissem, dixi posse illum ab hoc morbo liberari,
“ tametsi diuturnus esset, sed non lenibus illis medicamen-
“ tis, quibus ipse ab aliis medicis exhibitis recte usus fuerat ;
“ nam quampluries Viri docti illi medela præstiterant, et

The treatise of Ulrich Hutton, in which he describes his own case, is also deserving of

“ non semel, sed pluries decoctum ligni tradiderunt, atque
 “ etiam linimenta ad morbum Gallicum administrarunt, ne-
 “ que (ut dixi) liberari potuit, sed in deterius semper
 “ malum processit; quare, cum corpus universum labefac-
 “ tatum esset, præsertim jecur, necessum erat jecur re-
 “ frigeratum ad contraria alterare, et universa membra, re-
 “ ferta plurima materia pituitosa, expurgare, atque etiam
 “ ad proprium redigere temperamentum, sicque eum sani-
 “ tati restituere; verum, cum antea audisset, quod non
 “ levibus medicaminibus sanitati restitui posset, sciscitaba-
 “ tur qualesnam essent medicinæ quæ illi prodesse possent;
 “ respondi easdem esse, quas ab aliis medicis jam habuerat,
 “ videlicet decoctum ligni Indici, sed in majori quanti-
 “ tate, et cum alia victus ratione sumptum; qui tandem
 “ post multa promisit se omnia facturum; quare expur-
 “ gato prius corpore à communibus excrementis cum levi-
 “ bus medicinis, jussi, ut biberet decoctum ligni Indici
 “ hoc modo, et quoniam ætas erat, mane hora nona
 “ vel decima sumebat quinque calices vitreos dicti de-
 “ cocti calidi, qui calix sex uncias decocti continebat,
 “ post quem potum passulas comedebat ad quatuor usque
 “ uncias, et in lectulo coopertus per duas horas manebat,
 “ quo in tempore plurimum sudabat, plurimumque min-
 “ gebat, nam et per alia tempora decoctum ligni bibit,
 “ minimeque potuit sudare, quinque autem horis post pran-
 “ dium ex pane optime decocto, loto in jure parvi pulli
 “ sumebat, et aliquid etiam carnis dicti pulli comedebat,
 “ una cum passulis, bibebatque ex secunda decoctione ad
 “ libitum, sed deinde horis a prandio iterum quinque cyathos
 “ primæ dictæ decoctionis calidæ bibebat, et passulas post

note, not only because he probably wrote before Massa, but because Boerhaave himself

“ comedebat, et in lectulo per duas horas manens cum su-
“ dore, et plurima nictu quiescebat, quatuor postea horis
“ à potu cœnabat, cœna tamen semper fuit lenior prandio,
“ bibebatque secundam decoctionem ad libitum, qui ante
“ xx. diem ita bene habuit, ut, et dolores recesserint, et
“ tumores dissoluti fuerint, et exulcerationes sanatæ fuerint,
“ volui tamen cum dicta regula hominem usque ad quad-
“ ragesimum procedere diem, sicque sanus factus, incolumis
“ per multos annos vixit.

Case 2. “ Dominus Johannes Broila vir generosus magni-
“ ficus, dives, et nobilis vir, temperaturæ calidæ et siccæ,
“ cum plurimos annos laborasset morbo Gallico cum tu-
“ moribus per universum corpus, præsertim in capite, ex
“ quibus plurimi exulcerati erant, cum ossium corrosione
“ et in capite et facie magis, ita ut non hominis, sed mon-
“ stri cujusdam speciem præ se ferret. Hic cum tam Tu-
“ rini, quam Mediolani, et Papiæ plurimos medicos ad sui
“ curam accersisset, nunquam potuit liberari, neque potu-
“ decoctionis ligni Indici pluries sumpto, neque inunctio-
“ nibus plurimis factis, neque postremo suffumigiis uni-
“ verso corpori administratis, tandem in Galliam, Lugdu-
“ ni scilicet ad quosdam famigeratos medicos se contulit,
“ qui et ipsi plurimum laborantes nihil fecerunt. Hic cum
“ esset sine spe futuræ sanitatis adinonitu quorundam medi-
“ corum ut in Venetias conveniret, Venetias se contulit,
“ mihiq; domi narrans omnia præterita, et ostendens
“ omnes tumores, ulcera, et ossium corruptiones, roga-
“ bat ut sibi opem ferre vellem, promittens non ingra-
“ tum se in me futurum esse. Ego vero postquam homi-
“ nem solatus essem, et jussissem esse bono animo; cura

has written highly in his praise. There is however a circumstance mentioned by *Astruc

“ esset hiems et frigidissima quidem, jussi ut maneret
 “ domi, et custodiret se ab aëre frigido, quiescens donec
 “ tempus mutaretur, non tamen interim defuerunt auxilia
 “ quæ ulceribus subvenirent. Superveniente autem Februatio
 “ mense hominem expurgavi, jussique ut biberet decoctum
 “ ligni Indici cum mediocri diæta, quoniam excarnis,
 “ et macilentissimus erat. Ille tamen credens per cibi
 “ abstinentiam citius et melius posse curari, abstinebat,
 “ et parum aut nihil, me. inscio, comedere volebat,
 “ sicque processit bibendo usque ad quinquaginta dies,
 “ nec tamen convalere potuit, nam et tumores, et ul-
 “ cera omnia male se habebant. Res denique dimissa fuit
 “ naturæ cum optimo regimine cibi, et potus et aliarum
 “ rerum necessariarum usque in finem Augusti, quo in
 “ tempore expurgato corpore, iterum jussi decoctum ligni
 “ illum bibere mane et vesperi usque ad duas libras
 “ cum comestione passularum, et in prandio concedebam
 “ carnis portionem, et vini pauciferi cum secunda de-
 “ coctione diluti potum, qui tamen, cum esset severus
 “ et audivisset victum tenuem plurimum prodesse morbo
 “ Gallico, non parebat, sed abstinebat et ab usu carnis,
 “ et à vini potu. Qui etsi per duos menses bibisset, non
 “ propterea convaluit, sed una cum tumoribus, et malis
 “ exulcerationibus languebat. Superveniente vero hieme
 “ volui illi aliquid præter regimen resumptivum injungere
 “ sed una dierum, Famulus quidam sibi carus mihi signi-
 “ ficabat id esse in causa cur ille non fuerit sanitati re-

on the authority of Gesner, which, if true, shews that Hutton was deceived in his idea

“ stitutus, quoniam non paruit meis mandatis in regimine
“ eibi, et potus. Nam cum decoetum ligni bis assumpsisset,
“ nec carnem comedere, nec vinum bibere voluit, et
“ hoc quoniam cæteri medici semper et à vino et à car-
“ nibus cum abstinebant. Cum vero Magnificum virum de
“ futura eura alloquerer, dixi illum minime posse sanari,
“ at ille eum audivisset verbum, turbatus quærebat qualis
“ esset eausa, respondi quod ipsemet esset eausa, quoniam
“ me decipiebat, eum se minime obedientem præberet
“ meis mandatis, aperuique quæ dixerat mihi famulus.
“ Cumque ego sibi meam visitationem negassem promisit
“ scornia, quæ imponerem faeturum. Cumque ego homi-
“ nem obedientem in futurum esse credidi, in principio
“ veris exhibui iterum decoetum ligni Indiei, usque ad
“ tres libras mane, et vesperi eum comestione passularum,
“ et in prandio dedi jus pulli, vel vitulinæ carnis, et
“ portionem carnis ad comedendum, jussique ut biberet
“ vinum dilutum ad libitum cum secunda decoetione
“ tam in prandio quam in cœna, nequo volui ut ullo
“ pacto sudaret, sed contentus esset copiosa urinæ eva-
“ cuatione. Qui hæc ratione bibens decoetum per duos
“ menses, liberatus fuit à tumoribus, et ulceribus, atque
“ sanus et pinguis ex vini potu distribuentis nutrimen-
“ tum factus, ineolumis ad suos consanguineos in patriam
“ reversus est.

Case 3. “ Item Illustrissimus ac strenuus Princeps D
“ M. temperaturæ calidæ ac humidæ, eum subdominio
“ alicujus siccitatis facientis ad subtiliationem sanguinis,
“ ætatis consistentiæ, eum passus esset morbum Galli-
“ cum per multos annos, non potuit ex toto liberari

of having obtained a cure ; for according to this author, he was relieved for a time, but

“ quin relinqueretur ulcus magnum in capite bronchi,
 “ cum quo erant corrosæ cartilagines omnes partis capitis
 “ bronchi anterioris, ut posset unusquisque interiorem
 “ partem asperæ arteriæ inspicere, et tangere. Ulcus quidem
 “ erat antiquum ostracosum multorum annorum, os cujus
 “ tantæ latitudinis duo digiti simul conjuncti potuissent
 “ facillime ingredi ; et cum sapientissimi, ac expertissimi
 “ medici ejus consolidationem plurimis remediis tentassent,
 “ incassum tandem omnia acta fuere, nam Mediolanenses
 “ primarii medici, cum esset Vicedo minus in arce, ei
 “ medelam præstiterunt, similiter et Januenses primarii
 “ medici, nomine inclyti Regis Gallorum, Januæ plurima
 “ fecerunt, sed ipsi frustra laborarunt. Postremo reversus
 “ est ad Regem, Senioresque, et famigerati medici Lug-
 “ duni eam in curam susceperunt nec propterea ulcus sanari
 “ potuit, ulcus vero talis erat rationis, quod si sine penicillo,
 “ vel magno licinio ex bombace facto adaptum fuisset.
 “ Illustrissimus Princeps per illud spatium temporis sine
 “ vocè et dearticulata locutione manebat, appposito vero li-
 “ cinio sive penicillo ex bombace obstruente ulcus, recte,
 “ distincte, et sine aliqua difficultate loquebatur. Erat
 “ quidem vir ruffi coloris, habens barbam prolixam,
 “ coloris flavi, tendentis ad auri colorem, quæ ulcus per-
 “ belle tegebat, et occultabat. Et tametsi plurimi essent
 “ assistentes nobiles milites, neminem tamen ulcus erat
 “ notum, præter uni, qui secreto ipsi inserviebat. Accer-
 “ situs igitur ab Illust. Principe, ut eum viderem, sic ille
 “ me allocutus est. *Sunt quam plurimi anni quod te videre*
 “ *pro quadam mea mala dispositione desideravi, à qua usque*
 “ *in hunc diem nemo potuit ex medicis me sanitati restituere,*

not cured by this medicine; and afterwards died of the disease. But admitting this to

“ audiveram tamen et Mediolani, et Papiæ, et Januæ, et
 “ Lugduni, ac etiam in castris Nicolai Massæ nomen, et
 “ plures sanatos ab illo. Postea quam igitur pro negotiis In-
 “ elyti Regis cum Illustrissimo hoc Domino huc me contuli,
 “ rogo te, ut me in tuam tutelam saspicias, donec Venetiis
 “ manebo, nam vere non possum tempus aliquod determinatum
 “ meæ moræ tibi assignare. Scio equidem id malum quod nunc
 “ ostendam tibi, non cito sanari posse, tu vero quid agen-
 “ dum sit jubebis, et ad omnia me obedientum præstabo. Post
 “ quam præfationem, vocavit illum qui ei inserviebat, et
 “ ostendit mihi ulcus superius dictum, quo viso cum essent
 “ corrosæ cartilagines anteriores capitis bronchi, sic orsus
 “ sum. Illustrissime Princeps non est mirum si tot sapientes
 “ et illustres medici plurimum laborarunt, neque ulcus hoc
 “ sanare potuerunt, cum pars quæ deperdita est, sit pars membri
 “ quod à semine ortum habet, namque membra à semine orta,
 “ si deperdita fuerint, nequaquam instaurari in adultis possunt,
 “ in pueris parvis, et adolescentulis aliquando hoc visum est,
 “ in adultis vero minime. Cæteræ partes quæ à sanguine fiunt,
 “ facile renascuntur si aliqua de causa deperdantur. At ille,
 “ rogo, inquit, ut quotidie huc accedas, et aliquid, ut tibi
 “ videbitur, faciendum injungas, nam ulcus hoc est derelic-
 “ tum postquam plurimis à medicis factis remediis à morbo
 “ Gallico evasi. Ego vero cum vidissem Illustrissimum Prin-
 “ cipem paratum, bonæ habitudinis, et in reliquis corporis
 “ partibus sanum, et tempus esset acceptabile (erat enim
 “ post pascha in principio veris in fine mensis Aprilis).
 “ expurgavi corpus à communibus intestinorum et pro-
 “ pinquorum membrorum superfluitatibus, bisque sangui-
 “ nem apertæ vena jecoraria misi, deinde jussi, ut aquam

have been the case, by Hutton's own account it appears that he had undergone several

“ decoctionis ligni Indi biberet. Qui cum esset assuetus plurimo potui, ut solent Domini Galli facere, cœpit prima die bibere mane duas libras primæ decoctionis ligni, ac post passulas comedere, et in lectulo manens per duas horas sudare, sed ante prandium per duas horas bibit ex secunda decoctione libram unam, postquam duabus horis prandium accepit, et fuit ex pane biscocto et passulis simul, bibitque unam phialam aquæ secundæ decoctionis; inter prandium et cœnam ex secunda decoctione ad libitum bibeat; quatuor postea horis ante cœnam iterum primum decoctionis calidæ tres libras bibit, et in lectulo coopertus manens per duas horas sudavit, cœna fuit minor prandio, videlicet ex pane biscocto et passulis, et potus ex secunda decoctione ad libitum, processit Illustris Dominus semper potum primæ decoctionis tam matutinum quam vespertinum augendo, et etiam secundæ decoctionis in prandio et cœna, ut tandem ex prima decoctione octo phialas biberet, et ex secunda decem et duodecim, aliquando cum plurimo sudore, et copiosissimo mictu et seccu; et hoc fuit per spatium quinquaginta dierum in quo tempore sexaginta et plus libras ligni Indici ad magnam stateram consumpsit: super ulcus vero capitis bronchi quater in die apponebatur cotton madefactum spuma primæ decoctionis, nam dum coquerent lignum, spumam ad hanc medealem servabant; sicque Dei omnipotentis gratia, et auxilio præter aliquam spem, Illustrissimus D. evasit sanato et consolidato ulcere epiglottidis, ex toto callo, loco cartilaginis, supergenerato; res profecto mira, et digna ut literis ad hominum languentium utilitatem, et medentium instructionem man-

courses of mercury before he used guaiacum, and if this medicine did not cure him, yet as it took off his symptoms for a length of time, it may be considered as a useful fact, and will warrant the inference, that by a combination of this medicine with a more judicious use of mercury he would probably have been perfectly cured. Even the mere palliation of symptoms like those he has described is a sufficient proof that it has some efficacy; for mercury itself, when employed in the modern way for the same symptoms has often no better effect. How frequently do we see a subsequent course of mercury cure, when the preceding one has only enervated the disease! This man's case was a pox of long standing, for he had been diseased for eight years. Among other symptoms he had

“ detur: Possem et plura alia miracula, quantitatis operationis decoctionis ligni Indici, quæ in medendo in dies à
“ me visa sunt, scribere, sed ii tres casus a me recitati,
“ satis erunt, ut homines aliquando in maximo morbo Gallico
“ se convalere posse confidant. Quod si quis alios ægrotos
“ cum sævissimis accidentibus, maximis et fortibus remediis,
“ sanitati restitutos esse scire desiderat, illud assequetur
“ facile, si universum processum istius libri legere voluerit.”
Aphrod. cap. x. Nich. Massa.

nocturnal pains, nodes, and a gummatous tumour, which rendered him incapable of raising one of his arms. If symptoms like these can be removed for a time by guaiacum, it is well worth the inquiry how far it may, under certain circumstances, be revived, and still retained, among our other antivenereal remedies.

Some of the early writers seem to me to have been fully sensible, that this was a remedy only for the late secondary symptoms of the disease. Massa employed it successfully in that particular stage of it, in which the periosteum, the internal muscular and aponeurotic surfaces and bones were affected. I apprehend if we had not at this period of the disease the above facts to guide us, yet that its known power in rheumatism would lead us from analogy to employ it in venereal pains. The same parts are frequently affected in the one disease as in the other. As in the one, so is there frequently in the other a disposition to metastasis. The metastases are indeed specifically different: but this symptom, of all the others, which attend a late pox, seems to me to be that which mer-

cury has the least power over ; and I think it very probable that by uniting the properties of Guaiacum with those of mercury, we may frequently obtain what is not generally obtainable by either singly. Every person who has been much versed in practice, must be fully sensible of the difficulty of effecting cures when the disease has acquired a strong propensity to these translations, and it is, I believe, to the prevention of these that the properties of Guaiacum are particularly applicable. Or if without curing the disease it will only stop the progress of a venereal caries, more especially when the nose or palate are affected, it would be highly valuable. According to the account given by those who have relied on this medicine, it appears that it does not relieve under a number of days ; it is not therefore to be compared with the decisive effects of mercury, when they take place early, for stopping the destructive progress of a late symptom. However, it is evident from the authority of Boerhaave, that it has great effect in a venereal caries of the palate, nose, and fauces ; and therefore in that particular case in which these parts are injured,

and there are at the same time diseased spongy gums, with a disposition to salivate too readily, it may, perhaps, be singularly efficacious as an assistant to the more powerful general use of mercury.

The early and late symptoms of the disease appear, though specifically allied, to have very different effects on the constitution; and without any stretch of fancy, it may be fairly presumed, that each period may require a treatment somewhat different. In short, though I can readily allow that, with respect to some of the late symptoms, the disease must be cured or enervated by the specific in the first instance, yet it is more than probable, that Guaiacum may have no inconsiderable share of power in promoting the usual operation of mercury, or in relieving some of those irregular anomalous symptoms, to which no precise name has been affixed, and which it is very difficult to determine whether they arise from the relics of the disease, the remedy, or the action of other circumstances on the constitution.

A practice of dividing the periosteum, during

a mercurial course, in the cure of a very painful node, in order to lessen distention, has been recommended by Mr. Bromfield. I can readily conceive that this may sometimes be necessary, particularly when the pain is excruciating, and the action of the specific too slow or too sluggish to produce ease within a short space of time. I had once occasion to do this operation, and from that case I am rather inclined to trust to the antivenereal effects of the remedy than to this local treatment. But there may, notwithstanding, be cases in which it may be advisable, not only on the above principle, but as a means of checking the rapid progress of the disease under the periosteum. And I think the practice is necessary in certain tumours of the head, particularly those arising on the os frontis, in which I suspect there is a connexion with ozæna; and I would not confine it to tumours of this kind only, and in this situation; but when other tumours of the syphilitic kind arise on various bones coming and going, it may sometimes be no inconsiderable advantage if a small opening be made by rubbing the surface of the tumour with *Lap.*

Infernalis. Exfoliation will generally follow, and relief will be thereby obtained—not only to the part itself, but perhaps to the general affection of the periosteum throughout the body. Every part of the skin sympathises in a venereal eruption, and when in course of time there is a like translation of disease to the periosteum, the same kind of sympathy also may prevail. The one attaches to the skin only, the other to the periosteum; and afterwards to the bones.

With respect to venereal enlargements of the joints, they require no treatment distinct from that which is necessary for every other secondary symptom. Nor do those called gummata, which sometimes arise on muscles, or aponeurotic parts, nor those kind of sores which sometimes come on as a consequence of the latter, in which there is either an appearance of glaire, or of sloughiness, resembling that of a semiputrid tendon. The great specific properly applied will cure, and render common applications only, necessary.

Ozæna.

The celebrated Boerhaave was well aware of all the horrid consequences which sometimes attend this dreadful symptom. In order to settle its diagnosis, a very minute inspection into the two nostrils, the mouth, palate, velum pendulum palati, pharynx, and tonsils, is necessary; for it most frequently happens, that the affection, though perhaps principally occupying the nose, is yet not confined merely to that part; the voice of the patient, which is sometimes much altered from its natural tone, the seat of the pain, which is generally towards the root of the nose, the purulency and fætor of the discharge, which are frequently not only disagreeable to by-standers, but to the patient himself, the state of his previous symptoms, the ulceration, if in sight, appearing like lard, the cartilages of the nose and *alæ nasi* being shrunk, attenuated, or ulcerated, an unhealthy countenance, leanness, real or anomalous, venereal pains, venereal head ach, particularly if between the frontal sinuses and above the root of the

nose, are the circumstances to be inquired after and attended to.

Whether the diseased affection be confined merely to the nose, or whether there be also disease in the fauces and palate, even though from the laxity of the patient's gums, a disposition to salivate readily may be expected, yet I think, that the decisive effects of the medicine can scarcely be produced too early; because experience fully shews, in a great variety of cases, that these are the true means of checking the farther progress of all ulcerations, clearly venereal. The confinement should therefore be strict, and the doses of the medicine large, in order that its operation may be quick; the propriety of this practice is sufficiently evident, from the case mentioned in the first volume, in which the rapid progress of the disease was certainly checked immediately, if not entirely cured, by a very small quantity of mercury, suddenly producing the usual decisive effects. Having then in the first instance stopped the progress of the ulceration by the above means, the extinction and perfect cure of the

disease are to be attempted, as in every other late symptom, in which a similar mode of treatment is followed.

Having professed myself an enemy to all mercurial topics, where they can be clearly avoided; and knowing in the symptom under consideration, both from its malignity, and the late time of the disease at which it generally appears, that mere palliatives can avail but little, I would rather trust to general, than local means of relief. I cannot, therefore, recommend the indiscriminate use of a cinnabar fumigation, though it is in this case a common application, excepting in that particular habit in which the specific will probably act too slowly without some such spur. And here it will be, no doubt, an effectual assistant to the too weak action of the general remedy, and at the same time a strong and powerful corrector of the local mischief. Such were my ideas.

But since the former edition I have seen several cases of ozæna, some of long standing, some rapid in their progress. In one instance only was there a failure of cure, and that happened from an attempt to cure the disease by a long alte-

rative kind of course *under confinement*, without any considerable affection of the mouth.— The consequence was that the whole habit was rendered extremely irritable by the long use of mercury, and no proper effect of it could be made to take place either on the mouth or disease; the latter continuing to make its ravages the whole time with great destruction of parts. Had the practitioner urged the remedy boldly from the beginning, he would probably have raised salivation, and the patient been saved. In all the other cases, by continuing the specific till it had fairly produced this great effect of mercury, and by keeping up that effect for a sufficient length of time, the bones cast off, and the sores healed, but not without considerable injury to the nose and palate. The symptoms were not only completely removed, but the disease itself was perfectly subdued; no relapse of any sort having since followed. In these cases no topic whatever was employed. It was the genuine and unequivocal full antivenereal action of mercury on the system and mouth that did the business. A question however may naturally arise, Whether if mercury

had been applied locally, in the form of vapour, the destruction of the bones of the palate and nose might not possibly have been prevented? I believe that the origin of ozæna is generally deep seated, above the root of the nose; it may be in the diploe of the bones of this part of the cranium, or in the spongy cells of the os ethmoides. The symptom called a corona veneris is a node appearing externally, and is strongly expressive of internal mischief. It sometimes appears without ozæna, but it may be connected with it, and if neglected will generally lead to it. And this will depend a good deal on the date of the disease and depth of the caries. When the caries insinuates itself inwardly, it soon destroys the os ethmoides and vomer, the nose wanting its support falls, and the constant drip from above downwards injures still more the septum narium and palate—increasing the deformity, and producing great destruction of the contiguous parts. The practitioner should constantly remember that venereal ulceration and caries, which constitute the symptom called ozæna, may take place long before any external appearance indi-

cative of venereal mischief shews itself. And this is at least one reason why deformity so frequently follows. A mercurial course, well conducted, may cause the separation of the diseased bones, and prevent the recurrence of the disease. But this is all mercury can do. It has no power of renovating such bones as have been completely destroyed.*

* A very judicious writer of the seventeenth century has given some useful remarks on the treatment of ozæna and venereal affections of the fauces and palate. “Non tentanda symptomata horum etiam lævissimi curatio, (says Sir Theodore Mayerne,) nisi cura luis generali vel prægressa vel eomitante.” With these precautions, however, he used various applications to check the local putridity; among which are the following:

Si naribus inset erustosa scabies utere nutrito, seq:

R. Litharg. Auri loti ℥ij

Aeeti Rosar. opt. ℥vi. bulliant donee restent aceti per chartam emporeticam colati. ℥ij. hæc colatura suecessivè misceatur eum ol. nucum recenter sine igne express. Ung. Rosar. Mesue ā ℥i. f. Nitritum ad usum indendum vel penicillo vel turunda molli.

And in another place he says “Detergeatur primo narium uleus lotione sequenti.

R. Aq. Rosar. ℔js.

Majoran. et

Betonieæ ā ℥iv.

Myrrh. ℥ij.

When I reflect on the speedy good effects from a cinnabar fumigation, when it suddenly produced salivation, mentioned in another part of this work, in which case the progress of the symptoms were not only arrested, but were

Ægyptiaci ℥ss.

Vini Canarini ℥iij.

Mel. Rosar. ℥ij nī. f. Attrahat ā vola manus tepidè.

R. Mastic. Olibani Sandarac. Benzoin. succini. ā ℥i. fol. Tussilag. sicc. ℥iij. Cinnab. ℥i. f. omnium pulv. subtiliss. excipiend : q. s. Terebinth. Venet. f. pasta. ex qua formantur trochisti æqualis ponderis, No. xvi. instilland. singulis ol. salvix et rorismarini ā gr. 1. Excitetur fumus ex uno trochisto excipiendus per tubum et infundibulum, ore continendus aliquamdiu, et per nares reddendus. F. semel vel bis in die atque singulis vicibus pastillus unus absu-matur.

Si partes ab hoc suffitu scilicet ob succin. cæterasque et terebinth. nimis incalescant utere sequenti.

R. Cinnab. ℥i. Carbonis salicis. ℥ij. Benzoin. ℥ss. sandarac. mastic ā ℥ij. f. pulv. subtissimus in xvi partes æqual. pond. quarum singulæ in singulis chartulis servetur ad usum. Una chartula sit pro uno suffitu, qui tum pluribus vicibus candenti laminæ inspergendo excitetur. Aperiat os super fumum, et eo repletum, per nares evacuetur. Praxeos Mayernianæ. Vol. II. pag. 261.

I have not had any experience myself of the effects of these fumigations, but have always fumigated with cinnabar only.

apparently removed in a few days. I say, when I consider this as well as some other similar cases, and combine with them the horrible mischief which too often follows venereal affections of the nose and palate, and the difficulty there frequently is in stopping their progress, I am strongly inclined to believe that as we cannot always know, *à priori*, persons who salivate readily from those where there is a contrary tendency, in which the effects of mercury are slow and precarious; that the better way would be to fumigate at once, not simply as a very useful topic, but as a means of raising early salivation; the disease being thus checked, the necessary stimulating and putrefactive effects may be kept up, and continued for the necessary but indefinite length of time. I wish to check the putrefactive progress of the local mischief in the first instance; it will be no difficult matter afterwards to introduce more mercury by frictions, &c. It must be confessed, *res est plena-periculosæ alæ*, the mischief is alarming, and the sooner it be checked the better. There is not time for that slow operation which

mercury to the system has on some habits, but if with the local effect from the vapour, a proper affection of the mouth can be also produced, we connect two circumstances in the remedy which may speedily check the destructive progress of the symptom, and there will be no difficulty in following up, and perfecting the cure of the disease immediately afterwards. I am strongly inclined to think this would be an advantage at least in some cases. In the case of failure of cure in ozæna lately mentioned, it would probably have been successful. Though I have above expressed myself an enemy in general even to cinnabar, when employed merely as a palliative locally, yet when the vapor of mercury produces a considerable effect on the mouth, it becomes a general remedy, and as such may be capable not only of checking the progress of these destructive symptoms, but of adding to the cure, (if it does not actually cure the disease) by its effects on the mouth and system. In all cures of ozæna, which I have seen since the publication of the former edition, a

very considerable affection of the mouth took place, which was kept up by mercury, till the diseased bones separated, and the sores healed. And I will maintain that it is not only necessary to raise salivation in these as well as many other cases, but to persevere in the use of the remedy during the weakening, putrefactive, and evacuating process of salivation.

Having said this, with respect to ozæna, I must consider every other caries from *Inies Venerea*, as producing much less deformity, I may add much less danger to life.

I have therefore nothing to say with respect to caries of other parts; cure the *disease*, and the cure of the *caries* will generally follow—It has been shewn to follow without exfoliation, and in cases where there was an actual disease of bone, the integuments remaining entire. But it may be asked where there is no natural outlet in the larger, more dense bones than those concerned in ozæna, what is to be done? Why still the same rule of practice prevails; cure the disease, and though the caries may remain, nature, with proper assistance, will throw

it off, as in any other caries. In cases of caries, the *disease* is too often *partially* relieved, and not absolutely cured.

The same great and beneficent Creator, who in his wisdom has thought proper to afflict mankind with the poison, has kindly imparted also the antidote. I have no idea, (such in my opinion is the wonderful power of the remedy,) of its failing to cure, even when the bones themselves are affected and suffering from the disease, and that sometimes without exfoliation, many instances of which have been given in the course of this work.

As to the ulterior effects of the poison, as marked in the plates of diseased bones, such instances, I have seen, but such do very seldom occur, and may always at a more early stage be prevented.

Some writers have had an idea that a cinabar fumigation would dry up these kind of ulcerations prematurely, and before the disease, of which it is certainly one of the worst symptoms, could be cured. I can only say, that the most inveterate cases of ozænxæ I have seen, have been either relapses after the slovenly

use of this topic, or from a too partial operation of the general means of cure, and sometimes from both. The very delicate and spongy texture of the bones, generally concerned in this affection, is such, that though the periosteum and pituitary membrane may be the parts which are previously affected with disease, and though exfoliation does sometimes take place from them, yet we also sometimes find that when the ulcerations are inveterate, and have spread with great rapidity, so as to injure the whole of a small bone, whether of the nose or palate, such bone separates at the suture, and comes away entire, and these imply a very deep seated injury.

Sarsaparilla and Guaiacum may be singularly serviceable, and employed with the other means of relief in the above cases, or after a full effect from mercury. The authorities adduced in support of this opinion will, I hope, warrant me in submitting my conjectures to the public as objects for future inquiry.—With respect to the former of these medicines, I know of no situation in which it may not be with safety used. But with regard to

Guaiacum it has been interdicted, and I think with great propriety, in those who are naturally hectic, who have weak lungs, and a disposition to phthisis pulmonalis. And, if there is a tendency to hectic, from any other cause (that arising from the venereal disease only excepted) it may be also improper.

As to the treatment of a venereal hectic or marasmus, with which the foregoing symptoms are very often combined, the plan long since laid down and adopted by Nicholas Massa is certainly no contemptible one. Mereury should be employed first as an ameliorant and alterative in the smallest doses, and with caution, so that the patient may rather gain strength gradually under the remedy than lose it by its sudden and too forcible action. Every thing that can tend to mend the state of the animal juices, and invigorate the system, will be also necessary. Opium to procure natural rest, milk, country air, and bark may be used, but even this plan should be pursued under some degree of confinement. When the pulse rises, and the patient gains strength under this treatment, the medicine may be more forcibly urged for the

complete eradication of the disease. Mercury is certainly the only cure for a pox: but in cases where the system is so far debilitated that it cannot bear the natural operation of this medicine, in the form and way in which it is usually exhibited, it will be in vain to attempt a cure in that manner. There is probably in every such debility a tendency to putrescency, which this medicine will infallibly increase, if used in large quantities. This matter is, indeed, at present an uncertain one; and not yet regulated by any fixed points, or well adjusted scale; but though unascertained, these points are still discoverable. I must request of the reader to return back to that remarkable case of unexpected salivation from a topic to the skin, formerly mentioned; he will thence see the great difficulty of effecting a cure under the disadvantages of a pox thoroughly established, in a habit injured by climate, intemperance, and disease. But great as the difficulty was, it is evident to me, if this person's constitution had not been greatly debilitated, and his secretory organs very much relaxed by a warm climate, under which situation he was probably

strongly disposed to salivate readily; that the local application of a powerful mercurial to the pustules on the surface of his body would not have rendered the cure more difficult, nor caused that repullulation of symptoms which affected him for so long a time. It is evident from this instance that a certain degree of strength and health are absolutely necessary; not only to support the constitution, under the powerful action of this medicine, but that this action cannot be made to take place fully and fairly without them. And it also shews that a mercurial topic even to a venereal eruption may be hurtful.

I cannot close the cure of this division of symptoms, without calling the reader's attention once more to the leading principles of practice, contained in the foregoing pages. I will shelter myself under no subterfuge, nor court the applause of the world, by humouring prevailing ignorance, or unjust prejudices: what experience has fully shewn me that I will venture to disclose, let the consequences be as they may. And I do assert, and from long observation, that when salivation can be conducted

with the precautions mentioned in some of the foregoing pages, so as to bring on the proper decisive effects of the medicine, within the short period of little more than three weeks, that it is both as a method of cure for secondary symptoms, and as a mode of using mercury, infinitely more certain in its operation, and less hurtful to the constitution, than any other with which I am acquainted. To compare an alternative course with it would be to depreciate it; and it is much more safe than any other modification of ordinary salivation, in which the cure under confinement runs out to a much greater length; because the quantity of mercury employed is much less, and its effects by no means violent.

If it be objected that this time of cure is too short; I say if the state of the patient be such as to bear $\mathfrak{z}\text{i.}$ or $\mathfrak{z}\text{iss.}$ *ung. mercur. fort.* at each friction during the first week; $\mathfrak{z}\text{ij.}$ or more during the second week, and a small quantity more during the third week, that the proper effects may be produced in many cases within this period. I regret very much that a propensity to salivate too readily will too often render

these doses and this plan improper; and on the other hand an inaptitude to salivation will sometimes unavoidably prolong the time of cure, and increase the aggregate quantity of the medicine. But when the case is clearly otherwise; when the remedy acts in a kindly manner, gradually producing a tendency to a sore mouth, and allowing also of that gradual increase in the quantity of the medicine, to the beginning or middle of the third week, the decisive effects then shewing themselves fully, I say when a patient is fortunate enough to have a constitution that will allow of this, that such method of cure has ever appeared to me much more safe and effectual than any other. If it will cure venereal ophthalmiæ, venereal sarcocetes, gummatous swellings, nodes, obstinate venereal ulcerations of the tongue, &c. there can be no doubt of its curing other symptoms; and that it has frequently done this, I can very safely aver.

Cure of Anomalous Symptoms.

When treating of these symptoms it was said, that they might be divided into three classes, namely; into those which were owing to the suppressed and remote effects of the remedy, when improperly used; into those which were the genuine effects of the disease, but appearing in a broken, and as it were, disjointed manner; and that others were indeed the consequences of the disease, but without latent venereal mischief.

With respect to the first of these classes, having quoted the case of the girl who was under Dr. Sylvester's care, mentioned in the London Medical Observations, I must add, that in the same valuable work, Vol. VI. there is another instance, given by Dr. Dobson, of a train of anomalous, mercurial symptoms, arising from a suppressed salivation. These and the case already mentioned, are sufficient proofs that disagreeable consequences do sometimes follow, when a check has been given to the

natural action of this medicine on the salivary glands and skin. Having also adduced two instances of palsy, which I think may very fairly be set to the same account, I shall pass over the ill effects, which do sometimes come on in a severe alterative course, from the action of cold, drinking, and other irregularities, when the system is loaded with this medicine, and in the act of producing its putrefactive and evacuant effects; at a time when the pulse is unavoidably raised to a very high pitch *with every pore, and every secretion open*. And having called the reader's attention to these facts, in the present universal phrensy for alterative methods of cure, I can only lament that the obvious means of prevention, I mean an exclusion from a free communication with the external atmosphere, under a mild and well regulated regimen, is not more generally practised. Having shewn that even in the warm climate of Venice and Italy such a precaution was centuries ago adopted, I am astonished to find that it has not more generally prevailed in this country: a country, from the great variability of its at-

mosphere, more inimical to the action of mercury than any other.

I shall next proceed to the consideration of some other circumstances, in the operation of the remedy, worthy our most serious attention. If we are to set the intrinsic merit of a mercurial course under regimen and confinement, as a means of curing the disease, out of the question, and compare the effects of the remedy, when used in this way, with a long and severe alterative course, we shall see a considerable difference. In the one, there is a quick operation of the remedy opposed to a slow one; in the other, effects which are natural and unequivocal, opposed to a laborious and often a suppressed action; in the one, a complete and speedy subsidence of all the disagreeable phænomena necessarily attending its operation; in the other, a number of complaints clearly deducible from its retention, and from its continuing to exert its effects for a length of time on the constitution, after the patient has ceased to use it. In one person I remember salivation was produced by

dancing six weeks after the discontinuance of an alterative course ; and it is worthy of note that this salivation, though violent, did not prevent the termination of the disease in nodes. I have often seen, even several months after the use of mercury in this way, that sore throats, resembling slight mercurial affections of the fauces, would come on, last a few days, and then go ; and upon a slight cold, dancing, drinking, or using violent exercise, return again ; which sufficiently prove that a portion of mercury, in each of these cases, was actually existing in the system in a state of suppression ; to which portion one or more of the above circumstances, by increasing the circulation, gave the usual, though slight effect, on the mouth and salivary glands. And these anomalous mercurial effects I have very frequently observed many months after the discontinuance of an alterative course.

Some of the effects of this medicine were said to be putrefactive—when these have been kept up in the system for a length of time, as in the case of the Medical Gentleman from

America, page 129, vol. 1. perhaps a disposition truly scorbutic, may be raised. By scorbutic, I here mean a putrid disease, resembling, in some respects, the sea scurvy. And this will, in some measure, account for that tenderness of the fibula and periosteum of which this person complained, and which ceased upon his discontinuing the medicine.

It is not to be wondered at if obstinate rheumatic pains, of the chronic kind, sometimes follow upon the free use of mercury, when it is considered that quick and frequent transitions from heat to cold will frequently produce them in those who have never been under a mercurial course. It matters not whether the pores be opened and the body be heated by violent exercise, or by the strong action of such a stimulant as mercury; in either case, the transition upon the application of cold, must be great; whether that cold arises from the evaporation produced by the contact of wet cloaths with the surface of the body; from an imprudent exposure to a current of air; or from the action of the dry easterly winds of this country on

that vapour which is constantly flying off from the skin, and is called the insensible perspiration. How many hundreds are there who overlook, or really are ignorant of the critical situation in which mercurial courses unavoidably place them, and indulge in all their usual amusements, riding, dancing, drinking, &c. That many have irreparably injured their constitutions by irregularities of this kind, and that some have fallen victims, at a very early period of life, to acute diseases of the peripneumonic kind, I have no doubt; and from these causes solely.

I know not what those persons mean who in the endeavour to produce a cure for Lues Venerea in all its stages, with safety and success, by alterative methods, when they moreover say they can do no harm in a climate like that of Great Britain. It is an imposition on the credulity of the world, and on suffering humanity! for frequently they not only do not cure, but they often lay the foundation of ill health for life. How many unfortunate men and females in this great city have lost their lives by exposing themselves to cold dur-

ing the use of mercury in an alterative way, without obtaining a cure for their complaints!

Having shewn that the action of this medicine has a tendency to increase the disposition to hectic in every the best possible temperament, but more particularly in that in which the constitution is highly and delicately sanguineous, in order to determine whether this medicine, so absolutely necessary for the extirpation of venereal complaints, can be employed in the one method with more safety than the other. I have only to enumerate the leading circumstances of each method, and will then leave the question with any medical man. In the alterative method there must be a larger quantity used than in the other; that quantity, large as it generally is, must act for a much longer space of time; that natural cure for its stimulating effects, the depletion of the lymphatic system, which takes place when the mouth is affected in the other methods, is repressed in this by exposure to air, and some other secretion must supply the deficiency; that secretion may take

place from the kidneys or the skin, or from both; if from the pores of the skin, the patient runs as much risque upon an unguarded exposure to cold as he does who, after heating his body with violent exercise, exposes himself to the same danger; but with this very material difference in the two cases; that in the one, the animal juices are not injured previous to such exposure, but in the other, they have been long worked upon by a medicine which produces general debility, and inclines them to a particular species of attenuation, or putrefaction. And, if a topical peripneumonic inflammation, in such a case, occur, it is generally violent, and, from the tendency in the habit to putridity, is accompanied with a peculiar degree of acrimony. In short, if the one method be well conducted, upon the completion of a cure, the symptoms of the disease, and the effects of the remedy subside together. Not so in the other, for though the disease be cured, time alone can take off its stimulating effects; and, till they perfectly subside, be it for weeks or months, so long must the person treated

be liable, upon committing any indiscretion, to the accidents I have enumerated.

As to the treatment of that hectic, which does not arise from the venereal disease, but from irregularities or mismanagement, in a habit already predisposed; I can only say, that it is much more easy to prevent its ill consequences, by an early and proper attention to regimen, habit, and the mode of using mercury, than to cure it. As a situation of this sort comes more immediately within the province of the physician than surgeon, I shall only remark, that when such tendency to hectic has been greatly heightened, during a mercurial course, by one or more colds, or other accidents; if there is much hardness of the pulse, a cough, or other symptoms, indicating the slightest peripneumonic inflammation, that the specific should be immediately discontinued; and, when these symptoms are removed, it may be afterwards employed in a more careful manner. There are only a few venereal symptoms which are immediately, or suddenly dangerous: and even these are generally of less consequence than

the accidents above mentioned. Besides that kind of medical treatment which these circumstances sometimes render necessary, but which I do not mean to enter into; the flannels should be changed for clean ones, the pores of the skin should be kept open by moderate warmth, within the house, and, as a means of quieting the universal irritation, opium, after proper evacuations; &c. will frequently be of the greatest service. When it can be used with propriety, it will, I believe, be found the best (and indeed in many cases) the only remedy against the stimulating effects of mercury.

With respect to the treatment of chronic rheumatism, arising as a consequence of inattention, during an alterative course, or after a cure under confinement, I must refer the reader to the general practice of physic, for similar affections. I can only say, that the properties of Guaiacum seem to me admirably well adapted to this particular case. If the pains which sometimes follow the free use of mercury be carefully attended to, it will, I believe, be generally found, that stimulants,

of whatever kind they may be, will have, at least, a temporary good effect. Whether this arises from the sedative power which the specific, after a long use of it, exerts upon the constitution, I cannot say, but having often noticed the good effects of other stimulants, it is, I think, probable, that the above medicine may be singularly useful. And, on a similar principle, the mercurial preparations in small doses have been frequently employed with success. As a powerful assistant to the natural action of the specific, in whatever way it may be deemed necessary to use it, no man, in a climate like that of England, should ever venture upon an alterative course, without defending his body with a callico, or, what is better, a flannel shirt, flannel drawers, and worsted understockings; nor should any one go suddenly into the open air, after a course under confinement, without the same precautions. So necessary was this precaution, that our wise forefathers in the different locks of London, thought it necessary that, even in a warm ward, patients should have flannel shirts, flannel drawers, and flannel stockings, with

the additional covering of a warm bed. How different is this from exposure to cold at all seasons in the open air. And the same practice still prevails I believe in most of the hospitals of London.

Trifling as these circumstances may seem, the neglect of them has, I am convinced, cost many a man his life, and been the true cause of ill health to no inconsiderable number of individuals.

With respect to those anomalous symptoms, in which the disease may be said to be rather suppressed than cured, they are, though suppressed, either clearly venereal, or they are obscurely so. If the former should be the case, they must be treated as other secondary symptoms; but if the syphilitic appearances and symptoms should be doubtful, the matter becomes delicate, and should be well considered. Under these circumstances, absolute certainty is not always to be gained, even from the most minute investigation. The symptoms may warrant the suspicion of a latent disease, and yet not amount to a complete proof that such disease is the cause of them. Under such a situation, much attention should be

paid to the constitution of the patient, and to his feelings. If a man thinks at all, the idea of having the lurking seeds of this deplorable malady within him, is a sword perpetually hanging over his head; it mixes with his most secret thoughts, damps every pursuit, and poisons every comfort of his life. There are certainly many men, whose minds are more injured than their bodies; but when a practitioner, from a due consideration of all circumstances, though he cannot say, positively, that the symptoms amount to what is strictly speaking venereal, yet, if it is probable that they will, in a course of time, become so, it is a presumption to go upon. In this, as in some other critical situations, the man of judgment will sometimes find enough to direct him without clear and absolute proof; and when that judgment has been duly formed, it is for the patient to determine, whether he will be guided by it; and, by taking a bold and decided part, free himself, at once, from all probable danger, by submitting to a full and unequivocal operation from the remedy. When it is considered how forcibly the idea of latent venereal

mischief will act upon some minds, even to the production of diseases, no less distressing, and infinitely more difficult of cure than the venereal. I think of two evils, a man chuses the least, who pursues the great broad line or conduct, and, by following that, either cures himself of the disease, if he has it; or, what is sometimes no less distressing, of his apprehensions, if he has not.

When I say this, I must remind the reader that there are some constitutions so framed by nature, that they will bear mercurial courses with perfect safety; nay there are probably some, which mercury will essentially serve; but there are others which it will certainly injure: and this last consideration should always operate, as a powerful dissuasive.

Having explained my sentiments on this difficult matter, with that openness and freedom, which experience has insensibly led me to, and which reason, I hope, will warrant, I must add, that it has been long a desideratum to procure relief, in anomalous cases, by less certain and direct means. The small progress hitherto made in our knowledge of the suppressed state

of the disease, our ignorance of the remote effects of the remedy, and of the consequences frequently arising from accidents which happen, either during, or subsequent to a cure, have given to modern quackery the appearance of doing more than it can, in justice, pretend to.

In every stage of Lues Venerea the symptoms may certainly be damped, though the disease be not cured. In proportion as it has been more or less broken down by the previous means of cure, so it is easy to keep it under.— And in this way, from the slightest effects of the specific, may the temporary appearance of a cure be sometimes produced.

But it may be asked, whether the disease, after having been more thoroughly enervated, does not sometimes return (if I may so say) to that leprous state, to which it, perhaps, originally owed its rise. If this idea be well founded, it may be readily conceived, that *Æthiops antim. pil. plumm. decoct. Lusitan.** and the smallest

* *Decoct. Lusitan. R Antimon. crud. ʒi. (in nodulo ligat.) Lap. Pumic. pp. (etiam in nodulo ligat.) Rad. Sarsap. China contus. a ʒss. Nuc. jugland. integ. No. X. Coque in aq. fontan. lib. iv. ad. lib. ij. et cola.*

doses of the saline preparations of mercury may have been eminently useful. With respect to the *decoct. lusit.* there may be many prescriptions for this medicine ; but the most unexceptionable I have seen, is that which bears the name of Van Swieten. If this medicine be duely considered, there are but two ingredients of any efficacy in it; these are the *antim. crud.* and *nuc. jugland.* for with respect to the Sarsaparilla and China, they seem to be in too small quantities to be really serviceable; and as to the punice stone, I know of no kind of use it can possibly be in the composition.

There is reason to think that both Sarsaparilla and China, in larger doses, may be of essential service; the former has been said to act as a sedative in taking off the stimulating effects of mercury on the system, as well as an antivenercal. The latter, I suspect, has a strong antivenereal power.

However, I believe there can be no doubt of the good effects of both *antimony* and *nuc. jugland.* in leprous affections; and if the medicine possesses any activity, it is principally to them that it owes its reputation.

Having explained that decisive conduct which should, in my opinion, direct us, both in regard to the diagnosis, and after that, in the method of cure; I leave every man at liberty to combat doubtful symptoms by an indecisive and equivocal treatment; for my own part, I will not do it. Having once fixed what the disease probably is, I know of no plan so unexceptionable as that I have pointed out; and the method pursued should, I apprehend, be conducted under confinement, by uniting frictions with the saline preparations of mercury, and availing ourselves, according to circumstances, either of Guaiacum, Sarsaparilla, or both. A very successful instance of cure, upon a plan of this kind may be seen, vol. i. p. 344. That cure was effected twenty years ago, and the lady has ever since enjoyed perfect health: and many more instances of success, from a similar mode of treatment, might be given.

Having, in the foregoing pages, shewn in a great variety of circumstances that the *great leading effects of the specific* must be attended to, in every mode of cure, how much soever the several methods may be diversified by the

preparations used by the combination of one preparation with another, or by uniting the power of other medicines with the antivenereal properties of mercury; I must request of the reader to observe that the decisive effects have been shewn to be precisely the same, whether they are raised at *an early or late period*. With these a practitioner may, if he pleases, begin; but with these, he should, in my opinion, if he means to cure the disease, as well as take off the symptoms, always end his course. It should never be forgotten, that in some habits there should be a proper affection of the mouth, or bowels, and that the former should be kept up by the reiterated stimulus of the great specific, in some form or other, till the cure is effected. And in habits the contrary of these, in which the slightest effects on the mouth only can be raised, the practitioner should never be inattentive to the great degree of lassitude which always attends the antivenereal operation of the medicine when it cures, nor be satisfied with the quantity of mercury, how large soever it may be, without such its natural effect; and above all, not to disregard

the great and manifest advantages of a warm room, as conducing, with frictions, or the chymical preparations of mercury, to bring on this lassitude, and that putrefactive attenuation, or fusion of the animal juices, (if I may so call it) which mercury, and only mercury, of all other substances hitherto discovered, has the property of producing.

Remarks on the Cure of Gonorrhœa Virulenta.

IN giving the medical treatment of Lues Venerea, properly so called, we have shewn that it was a disease highly infectious, of a very singular kind, and in general curable without much difficulty, by apportioning an indeterminate quantity, and the known effects of mercury, to its different stages. Inflammation, if we except, generally speaking, one or two particular symptoms, made no part of the disease, nor was it necessary to attend to it in the treatment. The curative indications were principally fixed to infection, and to the most obvious means of counteracting and destroying it.

But in Gonorrhœa Virulenta the road is by

no means so easy, nor is the treatment so simple. For admitting the syphilitic origin of this disease, we have in the cure inflammation as well as infection to struggle with ; and when in this combination it be remembered, that the remedy for infection is not always, not only no remedy for the inflammation, with which it is most frequently blended, but in many habits diametrically opposite to such affection ; it will be clearly perceived that the management of this disease will often require, both on the part of the patient and practitioner, much care and attention. It is from this combination of what I conceive to be two contrary principles that I shall endeavour to shew, although mercury be the only remedy in a Pox, yet, when applied to the system it is no cure for those high inflammatory symptoms which too frequently mark a Clap ; and that the latter, in its character, approaches much nearer to the nature of an acute inflammatory disease, than the true Lues Venerea already described : in that, I have endeavoured to shew that mercury cured by its specific effects, but in this disease those effects tend rather to relieve, under cer-

tain circumstances, than to cure;—rather assisting nature, and other means, than actually accomplishing a cure, by its antivenereal power.—When I say this, I confine the assertion to its action on the system in general, with a reference to the natural cure and particular habits.

It is worthy of note, that from the first appearance of *Gonorrhœa* as described by writers on syphilis, to the present time, it has not only been frequently but successfully treated in many different ways, without any other than an imperfect theory having been formed, as a foundation for practice. The old idea of *Brasovolus*, that the discharge consisted *pituitosæ materiæ pravâ qualitate gallicâ affectæ*, has been adopted by many of the subsequent writers, and even by Boerhaave himself. That it was, and is a modification of the venereal disease, has been believed, either tacitly or avowedly, not only by him, but almost by the unanimous consent of all practitioners living or dead since his time. A doctrine so generally received is probably well founded, more especially as a late experiment, though it may not give entire conviction

as to the truth of the more ancient opinion, yet tends to confirm it. And what should be fairly put in the same scale is the fact, that the general effects of mercury under certain states of the body (as I shall hereafter attempt to shew) seem to lead to the same conclusion; although these effects in Gonorrhœa may certainly be explained on other principles.

There appears to have been no small degree of inconsistency between the theory and practice of some writers on Gonorrhœa. For although they have considered it as a modification of the venereal disease, they have treated it as a mere catarrhus affection. Hence arose the use of such medicines as were supposed to operate particularly on what were called pituitous humours; and hence also originated their use of drastic and hydragogue purgatives. So different, for a considerable period, was the established theory of this disease from the established practice! And even so late as the time of Dr. Sydenham, if his natural history be compared with his method of cure, it will be found that he blended Gonorrhœa with Chancre, when in the same history he considered

them both primordia of *Lues Venerea*; and that although his practice in the cure of the two affections plainly contradicted such distinction. In short, the majority of the first and subsequent writers have believed what is probably the fact—that this disease is a branch of the *Venereál*. This idea they carried along with them in their descriptions of its history, and to that extent, that some of them have supposed it an internal Chancre, that is, a Chancre within the urethra; although at the same time had they attended to their methods of cure in *Gonorrhœa*, they must have known that the consequences of such supposed *internal* Chancre were very different from an *external* one. For so long as the discharge in *Gonorrhœa* was suffered to continue, without any premature check, they might have perceived that the disease would generally end happily, although daily experience shewed them that a common external Chancre was not to be cured by dint of purging, or by suffering such Chancre to pursue its natural course simply, or under that kind of treatment. But at the same time I must remark, that there may be Char-

cures not only immediately within the orifice of the urethra, but deeper seated.

If it be asked, how it has happened that under a theory so vague, and a practice so irreconcilable to it, cures could have been conducted for more than two centuries? I answer—That from the mere contemplation of symptoms, when joined to a very moderate acquaintance with the effects of medicine, cures may be effected in many diseases, but more particularly in this, which has a natural cure of its own. For here the operations of nature, being generally stronger than those of art, will go on, though the theory be defective, and the practice unscientific, and even under these disadvantages ultimately prevail. But in order to this it seems necessary that the means of relief should not absolutely counteract this salutary work of nature; and this may be one reason at least why this disease has been so often cured in a great variety of different ways.

In the early stage of a fever there is sometimes no small difficulty in determining its true character; but in the treatment of Gonorrhœa there can seldom be the same kind of embarrass-

ment. For admitting it to be the offspring of infection, its general character appears to be inflammatory; as is evident, when the disease is fairly formed from its most striking symptoms. The difficulty of cure most frequently depending on the degree of existing inflammation; and when from the nature of the habit there is little or no inflammation, or when the inflammation has been sufficiently moderated by art; in both cases the symptoms are comparatively milder, and the disease more easily cured than under opposite circumstances.— And mercury in such cases, and under certain other circumstances, whether it be applied locally in the way of inunction, or whether it be given by the mouth, will have a very good effect in forwarding a cure; and that in much smaller doses than will be wanted to check the progress of a Chancre, or any other symptom truly venereal. I have often observed a few grains of calomel, and a very small quantity of ointment, terminate a Gonorrhœa, though no sensible operation has been produced by it on the mouth or general system. An effect so different from what occurs in the cure

of Chancre and other venereal symptoms, that it is with me a doubt on what principle mercury thus acts in Gonorrhœa, whether as an antivenereal, or as a promoter of a well-digested, kindly increased secretion.

If it be true that mercury in Gonorrhœa acts most safely, and with the greatest certainty, when there is but a slight degree of inflammation; and if the relief it gives be generally produced by using it in small quantity, and without those powerful general effects which we have shewn are necessary in the cure of Lues Venerea, it may be successfully employed in this disease without agitating further, or pretending to settle the nature of the gonorrhœal infection. These are practical facts which may stand without the aid of any theory, and be attended to, whether the disease be, as has been generally believed, a branch of the venereal, or not. Practical knowledge, when supported by a theory perfectly unexceptionable, and repeated experiment, may be considered as forming a complete system. It would be extremely easy, by falling in with the opinion of the day, to fabricate such a system.

But as our present knowledge of the nature of gonorrhœal infection seems to me imperfect, I must depend principally on practice for a solution of some of the difficulties attending the treatment of this disease. The only kind of theory attempted has been a natural history, as correct as my observations have enabled me to make it; and all I shall now add will be a careful and faithful narration of the effects of medicine in counteracting and curing such disease, as far as those effects have appeared clear and decisive. And this mode of cure I must adopt, without pretending to determine the specific nature of the disease treated.—If any one should be surprized at this avowal of my ignorance, or, *at least*, uncertainty, I beg of him only to reflect on the treatment of the Small-Pox.—How it has been for ages well known. Physicians have at all times, from the days in which it was first described by the Arabians, been well acquainted both with its usual symptoms and its cure; which cure, in the variety of hands it has successively gone through, has been gradually enlarged and improved. But we do not even

now know the specific nature of the infection; nor have we any medicine that deserves the name of specific in its cure:—and yet cures have been attempted, and success obtained, not by any correct theory or notion of the infection itself, but by a sedulous and unbiased attention to the progress of the disease in different habits;—to its obvious symptoms in different stages, and to the no less obvious effects of medicine on these circumstances. If we had waited for a correct idea of the nature of the variolous infection, we had been still to seek for a general mode of treatment in the natural Small-Pox; and still without the immense advantages justly attributed to inoculation.

What I take to be the general character of the *Gonorrhœa Virulenta* was not for many ages known; and Dr. Astruc was, I believe, the first man who, by joining the low antiphlogistic plan of the French to an after mercurial treatment, proved that a combination of two very different kinds of effects would produce a cure. And to him, whatever other opinions may have since been

adopted, we are much indebted. Before his time writers do not seem to have understood that infection could produce inflammation, and that the continuance of the latter would keep up and prolong the disease; nor to have believed that inflammation is the great agent in giving to gonorrhœal infection so much force and irritation as it really does.

The discoveries in regard to the effects of a cooling, purging, and antiphlogistic plan in checking the progress of the eruptive symptoms after inoculation for the small-pox, and thereby lessening the number of the pustules, were till lately unknown. And though Sydenham, with his usual sagacity, practically taught that this disease was of an inflammatory character in its first stage, and had in consequence of that idea recommended a cooling regimen; yet the obvious application of a similar doctrine to the Gonorrhœa has not (as far as I have been able to inform myself) been hitherto made. Although all the early and remote infortunia in Gonorrhœa shew at once the justness of the principle and parallel; and prove that they are the conse-

quences of inflammation ingrafted on infection: of course the principal means of relief must be derived from such medicines and treatment as are capable of appeasing inflammatory irritation in the first instance, and infection in the second. Why do a hernia humoralis—an inflammation in perinæo, or neck of the bladder, ever arise in Gonorrhœa? From inflammation having been translated or extended to these parts. What are the first means of relief? Antiphlogistics: which, by reducing the inflammation, leave the Gonorrhœa in a state or situation very similar to that in which it was before the commencement of those accidents, with the irritability and tension of the urethra greatly lessened, and a return of the discharge. Therefore the fair inference is, that if no particular irritation, whilst the disease was pursuing its natural course had been applied in such cases, and that natural course had not been checked, (more especially if antiphlogistics had been employed from the beginning,) these accidents, most probably, would never have happened.

Having already fully shewn the foundation

on which the received theory, that the Gonorrhœa is a branch of Lues Venerea, rests, without attempting to decide either on the one side or the other, I shall leave the question to be hereafter more fully and satisfactorily settled in the way formerly pointed out; and having no where endeavoured to maintain that I was not a believer of the general opinion, or saying more than what amounts to this—"That such opinion has been admitted without sufficient proof: I shall proceed to practise on the basis of natural history, and shall endeavour, in the treatment of Gonorrhœa, to pursue the plan long since laid down by Sydenham, for extending the knowledge and cure of diseases in general. I am induced to this, not only because I think the plan a good one for this particular disease as well as others, but because some respectable practitioners seem to me to have departed from the old road too inconsiderately, without having been able to find out or recommend a better. With respect to our present subject, as well as to some other parts of surgery, it may be said, that

if the natural history of this disease, and the effects of medicine in its cure, had not been lately too superficially treated;—if anatomical and physiological researches had not been substituted for practice, and employed with little advantage in the investigation of its nature; if we had not been for some years amused more with hypothesis, speculation, and refinement, than with such practical facts as have been known and long proved, we must have had in this disease, from so extraordinary a man as the late Mr. John Hunter, something like the *Praxis stabilis et consummata* of Sydenham.

Amidst a great profusion of curious but extraneous matter, from a great number of useful anatomical, philosophical, physiological, and medical observations, contained in Mr. John Hunter's work on the Venereal Disease, I fear the student will in vain search for that steady and decisive practice which may be said to be the perfection of the art. If this gentleman had attended to the practical truths promulgated in many different authors, both in this and the last two centuries, we should probably have had in this celebrated work less theory, but more

practical knowledge.—This critique will apply not only to his treatment of Chancre and its consequences, but to that of the *Gonorrhœa Virulenta*, in which he has depended too much upon nature, without attempting to assist her by art; and that although he admits the disease to be the effect of venereal infection.

It would be a tedious and laborious task to enumerate the several ways by which the cure of this disease has been attempted in different ages. After passing over a number of other writers, I shall therefore only take a cursory view of such modes of treatment as have been handed down to us, under the celebrated names of Sydenham, Boerhaave, and Astruc. I am induced to this, to shew that they were not only able to cure it effectually, but their observations, how defective soever they may be, bear much stronger marks of practice and useful knowledge than some of the productions of the present day. I can never bring myself to believe that such writers should be discarded as old and obsolete. If they may appear to some persons defective in theory, I can only say I wish we had less of it in this disease than we

now have. Their practice was, in a great measure, the foundation of the present : and was, as will be shewn in the following pages, in many respects excellent. The world has been long in possession of their thoughts ; and the share they have had in improving our methods of cure should be acknowledged with candour, and repaid with gratitude.—Without entering minutely into them, it will be sufficient if I confine myself to such particular observations as have had a tendency to influence the present treatment of the disease. They who wish for a more full account may consult the authors themselves. And I am convinced they may still be read with no less pleasure than advantage, and am sorry that the limits of this work will not allow me to note also many other useful hints in subsequent writers. A student, when of a certain standing in the profession, cannot read too much, nor be too cautious in believing implicitly, without due consideration, the ipse dixit of any man.—He should pin his faith principally on those writers who have endeavoured to describe and form a judgment of symptoms and the effects of medicine, from

what they have seen ; men who could clearly distinguish the superior importance of pathology and therapeuticks over the useful, but less productive science of anatomy. Authentic medical facts may be compared to the well-known characters of arithmetic. They are a kind of universal language understood by the intelligent of every country, and are not the less valuable for having been remarked or used by others. Nor if it should be urged that they are few in number, or applicable to other diseases, are they less important on these accounts. For, to carry on the comparison, in like manner as the arrangement and reciprocal action of figures may be varied and so managed as to form new products, and solve many highly useful questions, so may these facts. It is by a knowledge of old, that we must lay the foundation for the acquirement of new truths. Improvement is progressive ; and if our remote and immediate ancestors had not transmitted what they knew to posterity, and posterity had not received that knowledge to exercise their ingenuity upon, there could not only have been no improvement, but no

science ; and mankind at this day would have been almost in the uninformed state of nature. With these reflections, intended to excite our medical youth to the study of medical writers in general, I proceed to make a few observations on the writings of Sydenham, Boerhaave, and Astruc, in this disease.

Sydenham's method of cure consisted principally in giving purgatives so frequently, and of such strength, as to produce very copious, and, I should suppose, sometimes rather painful evacuations per anum : for his purgatives, although sometimes of the lenient, were generally of the hydragogue, or even drastic kind. In this practice he aimed at one of two indications.—“ *In remediis cathartieis quantum hucusque usu comperimus, curationis omnis cardo vertitur, quorum auxilio, vel educitur humor peccans vel procuratur diversio succorum corporis naturalium, qui aliter hosti in pabulum cederent.*”

It appears that for the first fortnight he purged every day, or till the heat of urine and purulency of the discharge were greatly abated ; then every other day for the next fortnight :—

after which he purged only twice a week. If the disease did not yield to this course, or if the patient was not easily purged, he gave occasionally a stronger cathartic; and when the cure went on too slowly, he employed *Hydr. Vitriol. gr. viii.*—twice or thrice, at proper intervals, lest it should occasion salivation, or else *Pil. ex Duobus cum Calom. gr. x. bis in septiman.** When he found an aversion in the patient to cathartics by the mouth, or when, from a peculiarity of constitution, his other purgatives did not avail, he ordered clysters twice a day, composed of purgatives *cum Terebinth. Venet. ʒvi.*—and every night *Opobalsamum gutt. xxv. vel. Terebinth. Cypress. Q. N. M.* The diet was refrigerant and light, without wine, spirituous or strong fermented liquor, (small beer alone being allowed at meals:) the drink at other times being milk, boiled in three times its quantity of water, and on the intermediate days of purging, a cooling

* In Mr. Hunter's observations the cure of a *Gonorrhœa* is mentioned as having taken place from 20 grains of Calomel given in one dose; and he seems to have considered it as an extraordinary fact. Something like this fact seems to have been known to Sydenham.

emulsion. In a very sanguine constitution, and when the disease was obstinate, after having spent a month in purging, he recommends bleeding; but what is singular, he says he is fearful of it at a more early period. He used no injection but that of *Aq. Rosar.* and that only at the declension of the disease.

He adds:—"Hac methodo quæ mihi semper pro voto cessit in Gonorrhœa sananda, meliorem nondum comperi, maxime in eis, qui facile purgantur. In eis enim qui purgantur ægrius—curatio, licet nunquam fallax, tamen non nisi post longum temporis spatium, perficitur." In this last peculiarity of constitution he repeated the bleeding, made his purgatives stronger, gave them more frequently, and persevered in them for a greater length of time; or else he used the clyster above mentioned: but he relied principally on purgatives.

Without presuming to expose the little blemishes in the theory and practice of this great man, it is sufficiently clear, that from such a course of medicine as he has recommended, the two indications of cure in every inflammation, namely, derivation and evacuation, must

have been answered, and the latter made not only from the system in general, but from a near and almost contiguous surface to that of the urethra, namely, the mucous membrane lining the rectum. The great and manifest advantages of a drain from vessels or surfaces in the neighbourhood of a part inflamed are now too well known to need much comment. If local evacuation, from an inflamed mucous membrane, can be of service in some dysenteries, in catarrhus affections of the chest, or in a phlegmonous inflammation of the intestines, it is more than probable that purgatives, even in the rough way in which this writer seems to have used them, must have tended to diminish the inflammation in Gonorrhœa. The system in general having been thus weakened, and the local symptoms gradually moderated, the disease generally ran a shorter course than natural without violence; and I make no doubt, though slowly, yet without any alarming circumstance. It is difficult to say, whether he used the Turbeth. as an antivenereal, or as a means of producing a powerful revulsion from the part. Neither Ipecac. nor the milder pre-

parations of antimony, were known in his time. But in the dose prescribed this medicine will generally prove an emetic. So that by the concussion to the whole frame which the violent action of vomiting must have given it was a relaxant; by clearing the stomach and intestinal canal of their contents it was an evacuant; and that it is a powerful antivenereal also, in the above dose, there can be no doubt. In this single medicine, therefore, were united the several properties—of producing relaxation, evacuation, and an antivenereal action; and, in consequence of this combination, a powerful revulsion. On this medicine, in obstinate cases, he seems to have placed great dependence. With regard to the *Pil. ex Duobus cum Calomel. gr. x.* which he sometimes substituted for this medicine, the purgative must have acted as a drastic one, and the mercurial as slightly antivenereal as well as purgative. We are told in general terms only the circumstances in which he employed the cathartic and terebinthinated clysters with *Opobalsam.* But it may be presumed that he did not use either one or the other early in the disease, or before

his course of purging, which must have been continued from a fortnight to a month, or more. The strict diet, or cooling demulcent drink, were used from the beginning. I have further to remark on this writer that the great irritation of his purgatives must often have occasioned not only tenesmus, but excoriation of the parts about the verge of the anus; that his method of cure was often effected without mercury, and, in the worst cases, by no great quantity of it; that, since his time, experience has fully confirmed the efficacy of medicines of the terebinthinated kind; and that, during the increase and state of the disease, no local means of checking the secretion from the urethra were employed, unless *Aq. Rosar.* can be said to have had this effect. But unless the purgatives employed acted by revulsion, and by producing such an irritation and secretion, both in the small and large intestines, as bordered on a strong diarrhœal, or something approaching to a dysenteric affection;—I say, unless this made a very considerable part in their action, the method will sometimes require, in the excess of irritation, the assistance of opium,

to render it easy to the patient, and, what is more, safe. For the production of tenesmus in Gonorrhœa may, in some habits, bring on an affection of the prostate gland; but when it occasions piles, and those piles bleed freely, such discharge must tend greatly towards a cure; and when they are distended and inflamed without discharge, they draw off irritation from the urethra. Another objection may be raised against the use of purgatives as prescribed by Sydenham; they may be said to weaken the stomach and digestive organs. It may be urged in answer to this, that in cases of dropsical weakness, the use of the more active purgatives were, and still are, sometimes vindicable; that if in such cases they can be employed, not only with safety but advantage, there surely can be no danger arising from them in Gonorrhœa; a disease generally afflicting persons otherwise in high health, where no such weakness exists, and where a daily supply of ingesta, perhaps of a very stimulating kind, is adding to the inflammatory nature of the disease.—It is certainly defective, at least in many phlegmonous habits, from the omis-

sion of bleeding during the early inflammatory progress of the disease; and there are almost an infinite number of cases which require the assistance of the semicupium or warm bath.

With respect to the learned Boerhaave's method, I must remark that from his very critical knowledge of the anatomical structure of the parts, principally taken from De Graaf, Ruysch, Littre, and others, he endeavoured to establish certain seats of the disease. In his theory and practice he copied Brasavolus and Sydenham, but he added much useful matter of his own. The following heads convey no contemptible idea of the goodness of his arrangement, and the accuracy of his knowledge. "Loci affecti sunt vasa mucilaginoso, in primis lacuna magna in dorso urethræ ad finem glandis; dispositio quæ hic oritur quænam est? Est inflammatio." Further he adds "Prima inflammatio faciat rheuma, pejor vero faciat suppurationem, &c. Hinc, nunc, oritur stillicidium transudans. Hæc transudatio fit semper per urethram. Sed in pessimo aliquando affectu hæc transudatio fit per substantiam glandulosam penis, ulceratio autem quæ hic fit, lenis est ut

patet clare ; quia per sex septimanas, imo per xii. potest Gonorrhœa talis tolerari sine curâ ; bene instituta vita ; et tamen non multum mali faciet. Unde patet hic lenem esse ulcerationem, quæ magis in præternaturali *distensione* consistit, quam in *consumptione* suppuratoria.*”

This quotation conveys but a faint idea of the order and judgment with which he has treated the anatomical structure of the parts, the different seats of the disease and its symptoms. His observations are too diffuse to be quoted at length, and too good to bear an abridgement without injury ; I must therefore refer the reader to the work itself, only observing that in his method of cure he was particularly attentive to the primary seat of the disease ; and endeavoured without astringents, at a very early period by frequent ablution, to cleanse the anterior part of the urethra. He conceived that the discharge consisted principally of mucus which contained the venereal matter as a vehicle, and that by increasing this discharge it was to be carried off. This compound, in his

* See Prælect. Academ. H. Boerhaave de Lue Venerea, 1762, Lugd. Batavorum, from p. 131 to 131-5.

opinion, was to be in due quantity, to flow freely, and suffered to remain as short a time as possible within the urethra; putridity was to be obviated, and the acrimony and virulency of the discharge corrected by such topics as had no tendency to check it. He endeavoured to produce relaxation by means of fomentation, and cataplasms of the emollient anodyne kind, and the warm bath. After due cleansing and expression of the virulent mucus he allows of emollient injections, but they were such as produced no pain, and had no effect in checking the discharge; and even these were not employed immediately, but after some time had been previously employed in the use of the above means: to which he added dilution, rest, and the most scrupulous attention to diet and regimen. Under the circumstance of considerable Chordee, he recommends both local and general bleeding, more especially in an inflammatory habit.—I find from his Aphorisms that he exhibited mercurial cathartics; but from his academical lectures it appears he employed only the common lenients and drastics, of which he has given a great

variety of forms. He says, what is perfectly true, that whoever is most successful in preventing a priapism will also be most successful in the cure of the disease. When for the removal of this troublesome symptom he found it necessary to take away blood from the vicinity of the part, it was done by opening a vein on the dorsum penis.

To say nothing of his purging course, which was fully as severe as that prescribed by Sydenham, he seems to have been too remiss in the evacuation by bleeding; for general, local bleeding, or both are not only necessary in cases of high inflammation, but they should often form the substratum for other remedies, and that at an early period. If this be not done in all habits truly inflammatory, other appropriated remedies will have only a partial and incomplete effect. He has ordered nearly the same natural balsams as Sydenham, in the latter stage of the disease, but of the effects of bark and opium he was not, probably, acquainted. The early opinion of Brasavolus (as was before said) added to the authority

of Sydenham, had great influence on his practice, in which he was not a little biassed by the anatomical researches of the age. He cultivated anatomy, as many well-disposed persons do at this day, with ardour; and expected to reap from this particular branch of science much more than it can give, either to the pathology or cure of this disease. But his directions in the first stage of Gonorrhœa were new, and worthy the attention of all subsequent writers. He added much; but had he made only this addition to our knowledge he would have deserved no small share of praise.

In Astruc may be observed a knowledge of anatomy sufficiently correct, well applied to the main subject; and a more extensive acquaintance with the nature of the disease and effects of remedies.

In the first stage he recommends the taking off inflammation by all possible means. He advises bleeding, in cases of phlegmonous and erysipelatous inflammation, as freely as in a peripneumony; and he seems never to have omitted this evacuation, even in other

cases not so highly inflammatory. The drink was a cooling ptisan, taken in large quantities; the bowels were kept open by lenient purgatives, or by clysters with cassia. If the inflammation did not give way to these means, an emulsion was employed freely, *cum Sal. Prun.* and an opiate added to each dose; which dose was never less than half a pint, and often repeated.—If neither the ptisan nor emulsion would agree with the stomach, he gave water *cum Sal. Prunell.* and if, notwithstanding these means, the disease gets ground, (which he says can never happen but from the great intemperance of the patient,) if the urethra be highly inflamed and troubled with chordee, &c. fomentations, cataplasms, and an injection of a small quantity of *Sacchar. Saturni* are to be used; he also gave this powerful medicine, as well as *Camphor*, internally.—To the latter there can be no objection; but to the former, though also recommended by the great Hoffman, there certainly is.

In the second stage he employed the *Ung. Mercur.* locally, but so as not to affect the mouth; and he preferred it to mercurials

given internally. His mode of inunction was to rub it into the whole of the pudenda, every third or fourth day. His purgatives which were sometimes employed with, sometimes without, inunction, were constantly of the lenient kind.—In the third stage he employed the natural balsams, with a milk diet, &c.

There can be no doubt that, under circumstances of considerable inflammation, an antiphlogistic plan is proper during the first, or, indeed, in any inflammatory state of the disease: but I do not find that he depended at all upon topical bleeding, and this will frequently be of the greatest service in this disease, when bleeding from the arm would not be admissible.—The French name of *ptisan* does not alter the nature of a diluting liquor; and the work of dilution may go on under that form as well as under any other. The addition of an opiate to the emulsion is useful, and perhaps a small quantity of *Sal. Prunell.* may be allowed; but the admission of *Sacchar. Saturni* into the urethra as an injection, under the circumstances mentioned, can hardly be said to be safe, unless the so-

lution be so weak and so nicely adjusted as to afford its sedative without its astringent effect;—an idea which I believe he never entertained; and he seems not to have been at all acquainted with the power of bark under certain circumstances of irritation and weakness in this disease.

The practice of different countries is often different. Whether the bowels be kept open by a medicine given by the mouth, or a clyster, which is more universally the custom in France, the intention aimed at is nearly the same in both countries; but the French practice has here an advantage over the English—relaxing, cooling, and allaying irritation by its local application, in a way that no purgative given by the mouth can possibly effect. But though this was his practice, it does not appear that he knew accurately the good effects of a warm bath.

He says, when the disease becomes milder from the use of medicine, it was cured in a few days; the circulating fluids were restored to their natural course, and the inflammation (of what he calls) the seminary receptacles was dispersed; the scalding of the urine, heat

and pain of the parts disappeared suddenly, and the patient was so perfectly restored to health, that he began to doubt whether he had even been troubled with a *Gonorrhœa*.—Whether our learned author was induced to make this remark from the contemplation of the whole of his practice in the first and second stages is difficult to say; but I can assert from experience that when in the first stage of the disease, bleeding, the warm bath, and dilution have been properly enjoined, and care taken to keep the belly moderately open during the use of that great appeaser of irritation, opium, an effect somewhat similar has frequently followed,—without nitre or camphor, without injection, and without the internal or external use of *Sacchar. Saturni*.—I mean when the patient has at the same time co-operated with the plan, by keeping himself properly quiet at home, avoiding exercise, women, wine, and other obstacles, with the use of mercury afterwards.

If an antiphlogistic plan be generally necessary in France, a country in which the common food of its inhabitants is neither so

gross, nor, generally speaking, so stimulating as in England, the practice will apply more forcibly to the natives of this than to those of that country. At the same time, in most other diseases as well as this, the French carry the use of the more powerful antiphlogistics to an unwarrantable length.—However, a great deal of our ill success and embarrassment in curing this disease has depended, I fear, on our remissness in this particular. It has been too frequently considered as a trifling complaint, requiring but little restriction to diet, and still less to regimen and medicine. The early symptoms have but seldom been speedily and properly counteracted; they have been suffered to establish themselves without a sufficient check, under no confinement whatever; and hence has arisen much tediousness and perplexity in the subsequent states of the disease. The prevention of all, the early as well as late accidents in this disease, turn, in a great measure, on the knowledge of these circumstances. In truth, it should be treated with the same care and circumspection as other acute in-

flammatory diseases; and this treatment is required more particularly at an early period in this, because its character is both infectious and inflammatory, tending generally, without any mixture of debility or putridity, to the genuine effects of inflammation.

In practice there are some things to be noted, arising from the action of medicine under particular circumstances. For example:—If I was desirous of using mercury, bark, or balsamics, in any one stage of the disease, it would be of consequence to determine, previously, whether they were to be employed alone, without a preceding antiphlogistic treatment, or not. There are many cases in which they would be highly efficacious after such treatment, though they have, generally, a very different effect in similar cases, when that precaution has been neglected.

It is always necessary to know whether the patient has ever been injured before; what the nature of that injury was; whether followed by stricture, hernia humoralis, or any other accident. It is also of consequence to learn who

ther he has been subject to complaints of the bladder and kidneys. For these affections give a predisposition to irritability, inflammation, and suppuration, which would have no existence if these parts were sound.

There are other variations arising from age, habit, temperament, and the season of the year. A young or middle aged person, if not of what may be called a very weakly phlegmatic temperament, will most frequently, when the disease has subsisted for a few days, have a white tongue, a pulse somewhat quickened, and an evident appearance of more or less inflammation. These circumstances are too often attributed to exercise, the weather, drinking, &c. but though these may occasionally co-operate, they are more generally produced by disease. They are most conspicuous in the sanguineous temperament, with florid complexion and light hair; and in persons who have dark hair, with strong vigorous constitutions. In contradistinction to these, there are habits but slightly disposed to inflammation, in which the discharge is great, and the local

irritation, when compared with the former habit, slight. I have touched so far on the nature of temperaments in conformity to the common language of medicine :—literally speaking, in *Gonorrhœa* there are habits disposed to inflammation, and there are others which are not. In the latter the discharge is copious and thin, the parts get unloaded, if it be suffered to continue, sometimes without any, and sometimes with very little attendant or subsequent irritation and inflammation: in such cases, bleeding is certainly not indicated; and though I am a strong advocate for this evacuation in the opposite temperament, or when there is considerable local inflammation, I allow that other remedies may have the preference here. In short, mercury alone, almost in any form, and with very little assistance from other collateral means, will effect a cure; and perhaps so favourable is the copious discharge and habit to a cure under these instances, that the slightest purgatives, with a regimen hardly different from that which such habits are accustomed to, will suffice for the removal of the disease. But I

must at the same time remark, that to check this discharge by any means *whatever*, before the parts, which have been, like a sponge loaded with water, gorged (if I may so say) with a fluid of some kind or other, may even, in the most favourable habit, be the means of producing a metastasis from the anterior to some other deeper and more remote part of the urethra.*

There not only exists this difference of temperament, but in each of them may be found another variation depending on a constitutional disease—the scrophula. When a person labouring under a Gonorrhœa is subject to redness, tenderness, and increased secretion from the eyelids,—has a thickened upper-lip, or redness, tenderness, and increased secretion from the glandulæ odoriferæ, such person will probably suffer more, and be cured with greater difficulty than another who has not any of these affections, and that, whether his habit be weakly or robust. The course of the seasons has also an effect even in this disease. Hot

* Vide a case in the Natural History of Gonorrhœa.

weather tends to make the discharge considerable, acrimonious, and the inflammation great, and in the spring, or beginning of summer, the tendency to inflammation, whether of the phlegmonous or erysipelatous kind, will be most prevailing.

And lastly, amongst all the other awkward circumstancees, there is one very troublesome still to mention ;—namely, irregularity on the side of the patient, with respect to the connections he may have. A man in a fever, peripneumony, or dysentery, does not, when confined, place himself in circumstances liable to increase, or renovate, after a partial cure, the original disease : but amongst the vast multitude of persons who have Gonorrhœa, the practitioner has no hold, no tie whatever, unless the person afflicted be really of probity. When that is the case, under the faith of mutual confidence, a dependence may be made both as to the appearance of symptoms, and the effects of medicine ; but without it all order and power of discrimination is annihilated, or at best rendered very doubtful.—I will not enter into the matter how far, by a fresh renewal

of infection during a Gonorrhœa subsisting, such Gonorrhœa can be exasperated; but this may with truth be said, that infection of the chancrous kind may, by a fresh connection, be superadded to the gonorrhœal one:—that is, a man having already a Gonorrhœa alone, may, by a subsequent connection, gain also a Chancre, or chancrous excoriation, in addition to what he had before;—and even if he escapes that accumulation of disease, the simple circumstance of indulging in a connection *with a clean person*, will, at any rate, add to, rather than diminish the irritation that was remaining from the original complaint.

The Gonorrhœa Virulenta may be divided into two stages. The first of these commences with the most early symptoms, and may be said to end at that period, be it early or late, when the inflammatory symptoms, (among which the Chordee is included,) have passed their height, and are subsiding, or beginning to subside. In the first stage, therefore, I distinguish a tendency to inflammation, an inflammation increasing, the height of that inflammation, and the commencement of its diminution.—The se-

cond stage may be dated from this beginning to subside, to the perfect removal of the inflammatory symptoms, and cessation of discharge from the urethra. In the first stage, the symptoms are daily increasing, with more or less rapidity, to an uncertain degree of violence. In the former part of the second stage, although the disease has passed its height, yet there remains a degree of irritability with inflammation, still subsisting in a diminished state, but with a disposition to increase upon the application of any irritating cause whatever. In the second part of this stage it is more diminished, and the principal symptoms being gone, there remains only the Gleet.

I must remark, that each of these stages not only requires a different mode of treatment, but the treatment must quadrate with the variation of symptoms at the different periods of each stage. To consider this matter in a general way only, if a question be made whether mercury, or an injection should be used in the *second* stage, it will make a considerable difference whether they be employed at the beginning, or towards the close of this stage;

whether during the subsidence of the Chordee, or when it be actually gone. So with respect to the *first* stage, the difference will be as great, if not greater. Particular injections have been employed before the inflammatory symptoms were fairly formed, and they may have in some cases anticipated, and perhaps lessened the violence of subsequent symptoms. But it is a practice liable to many objections. The very same means of relief would probably have been wholly inadmissible at the latter end of this stage when the disease had gained its height.

From these instances, therefore, it will appear, that a great deal will depend not only on knowing the general symptoms which occur in each stage, but the beginning, middle, and the end of the two stages are marked by circumstances extremely different.

Agreeable to my plan for the treatment of this disease, an endeavour will be made to shew the utility of a certain set of principles, or practical truths, which, when properly combined, may be said to form a method of cure applicable to every stage of the complaint; in which the discharge is no otherwise altered but by the gene-

ral operation of medicine, and in which no injection of a specific or astringent sedative kind is used. This method, taking in all its circumstances, will cure the worst and most inflammatory cases; and though it be applicable principally to these, yet by a judicious selection from it, cures may be effected in other cases, not so strongly characterised with respect to inflammation and virulency. It is therefore, as *a whole*, applicable both to inflammatory and other habits; but the variation of habit and circumstances requires judgment in the selection or arrangement of its several parts or principles for medical use. And to this species of knowledge no man, not professionally educated, can be equal.

This method is a general one, standing on the foundation of being in no instance opposite, or irreconcilable to, the best established theory of the disease. In the combination of *Gonorrhœa* with Chancre, chancrous excoriation, or venereal Bubo, it is as safe and unexceptionable as in the virulent *Gonorrhœa*, in which no such combination exists.—And as, by due attention to the principles of this method, the

late and greatest infortunia of the disease may be obviated; so is it the method to which, in the last resort, application must be made in the most early; whether these infortunia arise, during the natural progress of the disease, from the effect of habit, irregularities, or any other cause.

Secondly—I shall endeavour to note the circumstances in which the disease may be cured by mercury alone, without injection.

Thirdly—I shall consider injections of various kinds, as a means of relief, and what I have hitherto observed concerning their properties, the cases in which they may be employed with advantage, and those in which I conceive them detrimental.

These methods are widely different, and yet they will all, *under certain circumstances*, cure. The defects, as well as the advantages of each, I will endeavour to point out, and shew, that the disease will with most success be cured, not by a slavish reliance or over-fondness for any one of these methods, but by a judicious combination of the powers of each, properly adapted to time and circumstance.

The first thing to be attended to after a suspected connection is cleanliness. The prepuce should be withdrawn, the whole of the glans, the parts behind it, and the internal surface of the prepuce, should be well washed with warm water, and perfectly cleansed. This will be best accomplished with a sponge; and the operation should extend not only to the whole of the penis, but to the pubes, testes, and perineum: afterwards, a bath, moderately warm, may be employed for the same purpose. The same attention I conceive to be necessary, not only thus early, but occasionally throughout every stage of the disease—with this exception only, that in the last stage, namely, that of Gleet, cold may be substituted for warm ablution. And this advice, with respect to cleanliness, is more particularly necessary in warm climates, and in hot weather.—Women who have suspected connections should be particularly careful in this recommended ablution, and may, by a proper syringe, wash themselves perfectly; and in men the ablution may be made more useful by injecting water moderately warm into the urethra.

The second article in our first method is bleeding. The well known inconveniences arising from inflammation in this disease, shew sufficiently the frequent necessity of employing evacuations in its cure. As in every Gonorrhœa there is a mixture of inflammation as well as infection, and as the former is probably the more active principle of the two, both in prolonging the disease and increasing the violence of the symptoms; so the nature of the evacuates, and the mode of their application, require a considerable degree of attention. The most superficial view of the natural history of the disease will clearly evince, that how trifling soever its first appearances may be, yet in a few days, and sometimes in a few hours, a progress of inflammation commences, which frequently, in its subsequent stages, cannot be checked without great difficulty. It is therefore of moment that these means of relief, I mean evacuations, be employed as early as possible; and if it can be done even before the usual time that the inflammation, heat of urine, and Chordée, naturally shew themselves, it will give great efficacy to the subsequent treatment, be that

treatment what it may. Prevention is at all times, when it can be effected, desirable; and if, by these means, the inflammatory symptoms can be anticipated, or rendered milder than they would otherwise be, the disease will run through its stages without violence, and readily yield to the proper remedies: the evacuations, therefore, should be as early as possible.

As soon as it is clear from all circumstances that the disease is a *Gonorrhœa Virulenta*, there are very few inflammatory habits in which it will not be necessary to bleed from the arm. The quantity to be taken away, and the propriety of repeating it or not, must be discretionary. It may be employed in a preventive sense, to obviate or lessen symptoms which would naturally take place without it, and as a foundation on which the subsequent treatment must be built, and should be very seldom omitted. Its effect is immediate; it is subject to no accidents on the part of the patient, and has a very extensive influence in forwarding the cure.

If the inflammatory symptoms should be

particularly violent, blood may also be taken away by leeches from the hæmorrhoidal vessels; and this may, in some cases, be substituted in place of bleeding from the system. The general state of the patient determines to what extent this evacuation should be pushed in most inflammatory diseases; and the rule may, with some restriction, be adopted here. When the system in general is affected, and such affection is indicated by a febrile pulse, a white tongue, considerable local inflammation and uneasiness, there can be no doubt as to the propriety of bleeding. And I have the strongest reason to believe, that the same kind of relief, in some habits, is also indicated, when the system is not apparently affected, simply from the evident appearance of inflammation on the part, and the known inflammatory character of the disease. For how slight soever the inflammation may be in its most early state, we know from the natural history of the disease that such inflammation must sooner or later increase, and ardor urinæ with chordée subsequently follow;—at least, this is the general progress.

If, therefore, the circulation be lowered before these symptoms have fairly established themselves, they will prove infinitely milder in their course. We do not attempt the absolute cure of the disease by this kind of remedy, but we may certainly moderate it: and in this, as in some other diseases, to moderate is to assist nature in the cure.—

Infection may, and probably does, act as the primary cause; but inflammation is the great agent in rendering that infection more virulent, the symptoms less manageable, and the disease itself more difficult of cure. Added to which, under the circumstances of a considerable and increasing inflammation, mercury, by whatever principle it may act in *Gonorrhœa*, will probably do more injury by its stimulus, than good by counteracting infection.

In some tender constitutions, the evacuation of a small quantity of blood from the hæmorrhoidal vessels may be preferable to bleeding from the arm. But if it be remembered that men do not generally contract claps but when they are not only in good, but

most frequently in high health, there can be but few cases of considerable inflammation in which topical bleeding will claim the preference; and there are still fewer, in which some blood may not be taken away, either from the system, or locally.—These cases are principally where the constitution has been weakened by other diseases, either prior or subsequent to the acquired Gonorrhœa.—I do not mean to deny the superior utility of topical to general bleeding, in particular inflammations, and in some lax habits, when the system in general is not affected. But as many will not submit to topical bleeding in Gonorrhœa, it is generally much safer to take a moderate quantity from the arm, than to omit it altogether in all inflammatory habits.—On the contrary, when topical bleeding is submitted to, it may in some cases be powerfully assistant to bleeding from the arm; and in others, it may very properly supersede it. If, according to these rules, persons labouring with a true, unequivocal Gonorrhœa, (and I do not call every slight running without inflammation by that name) were treated,

in the first instance, with one or other of these evacuations, as the foundation for other remedies, we should find this one of the easiest diseases in nature to cure.—Will any man say that the operation of mercury, whether locally or generally applied, is more safe in an inflammatory disease, when no evacuation of this kind has been used, than when it has? Will he say, that the *Bals. Capaiv.* or other medicines of the stimulating terebinthinate kind, are as safe where this evacuation has not, as when it has been employed? Or will *Opium*, or injections of any sort or kind, act with equal safety or certainty, when this evacuation has been omitted, as when it has not? Or can it for a moment be supposed that a disease, every symptom of which marks inflammation in the strongest manner, can always pursue its natural course without interruption or trouble, when these powerful aids are wholly withheld? Are there not many causes of irritation, all of which tend to keep up inflammation subsisting in the urethra during the progress of this disease? And is it not clear in order to succeed in the cure,

that these, must be counteracted in the first instance ?

The second kind of evacuation necessary in Gonorrhœa is purging. With regard to the extent to which it may be carried, I think it sufficient if the bowels be kept moderately open ; and that in our choice of purgatives, the lenient, as being more cooling, be preferred to the drastic, or even to those of the hydragogue kind.—The saline purgatives have frequently been employed for this purpose ; and they would be very useful, if they did not probably increase the stimulating power of the urine, by adding to its salts. To render this inconvenience of less consequence, they should, when used, be dissolved in a large proportion of water, and the drinking plentifully of diluting liquors should be particularly insisted on, even to the night after, as well as the day on which they are given ; and if thin water-gruel, or barley-water, cannot be had, plain water will answer the purpose, though less effectually. As to other lenient purgatives, if the bowels are easily moved, there can be no difficulty

in the choice ; but, if otherwise, their operation may be quickened by the addition of a more powerful evacuant. When the use of this class of medicines in *Gonorrhœa* is mentioned, I do not mean to lay the stress on them which Sydenham, Boerhaave, and some other writers have done, but must insist on it, that they are, to a certain degree, necessary during the inflammatory states of the disease ; not only to obviate repletion, but to counteract the constipating effects of a remedy of no small moment in the cure, I mean opium.—And when the treatment is not conducted strictly on an antiphlogistic plan, or when bleeding and other means of lowering the subsisting inflammation have been entirely omitted, this kind of evacuation becomes the more necessary. For there is a very material difference; whether it be employed in aid of the general plan now recommended, or whether it be so far depended upon as to be the *only* evacuant.

On the article of dilution very great stress has been laid, and, I think, justly. It has been adopted not only as a mode to dilute

the salts of the urine, thereby rendering it less stimulating, and not so apt to cause that kind of sensation in its passage along the tender and denuded surface of the urethra, called heat of urine; but dilution has been said to answer the purpose of an injection, and that not only partially, but generally, throughout the *whole* passage of the urethra. Its utility as a mode of relief in this disease is certainly well founded; but it is only one of the means, and should not be depended upon alone:—generally speaking, it cannot act fairly without other helps. For instance, in full, young, plethoric habits, with great inflammation, it would avail but little, without the foregoing evacuations and other parts of our general plan. And the same may be said of demulcents when mixed with diluents: they will all of them shew some degree of power in alleviating the painful symptoms of Gonorrhœa, even when used alone, in habits rather irritable than inflammatory; but they are most useful assistants to the more powerful means of relief:—and all I need add is, that they appear to be necessary parts of the general treatment.

Under the head of Relaxants, may be comprehended two kinds of remedies—the one internal, the other external.

The internal relaxants consist of antimonials, whether used in the form of emetics, or in small doses, so as to act more constantly on the skin. The former method has not had (as far as I know) any place in *Gonorrhœa*. But, perhaps, if a powerful revulsion should at any time become necessary, *Tart. Emetic. Pulv. Antimon.* or *James's Powder*, might be given with advantage, so as to prove emetic. But they seem to be more generally indicated in small doses, and during the height of the inflammatory symptoms, when called in to assist other means of relief.

The great utility of the warm bath in *Gonorrhœa* is not to be imagined by those who have not fully and fairly practised it.—If bleeding,—if purgatives,—if dilution,—if internal relaxants are ever necessary to quell the more refractory symptoms of this disease, the warm bath must be more so. For all the former act on the habit, and by that general action tend to relieve the part affected; but this is a remedy which im-

mediately and directly procures ease, lessening inflammation as well as irritation at the same time, much more by a local than by its general action, and that without deranging, in the smallest degree, the natural means of cure. Besides, it may greatly forward the cure by relaxing the parts, and promoting or reproducing the discharge when it has been checked improperly.

It may frequently be employed without a previous antiphlogistic regimen; but in all cases in which the symptoms are likely to run high, or in which they are troublesome, that kind of regimen should precede it. Having experienced, in numberless instances, its power of alleviating the symptoms with great celerity and certainty, I can venture to recommend it with confidence: and in many other cases, when the above regimen may not from a tendency to weakness, be so proper or necessary, from but a slight disposition to inflammation, or other circumstances, it will be of singular service.—Under this division may be comprehended the partial application of warm water, whether locally in

the form of fomentation, by means of bladders filled with the fluid and applied to the perinæum, by immersing the part in the same fluid, or setting over the vapour of warm water from a close stool-pan. These means are of less efficacy than the warm bath: they may however be had recourse to when that cannot be obtained.

Of equal power with the foregoing is *Opium*. It may be given with the same precautions; and from the combination of this medicine with the warm bath the good effects are often beyond credibility. There are some constitutions in which it does not agree perfectly; but with the precautions of a previous antiphlogistic treatment with open bowels, even in these habits it may be given with the utmost safety. It may be employed two ways either by the mouth, or with oil and warm water, in the form of enema. The first, being the most agreeable and convenient, may be generally used; but the latter when submitted to is infinitely the most powerful, not only as a relaxant, but as an appeaser of irritation. And it has this further advantage,

of being applied to a surface in close connection with the bladder and diseased urethra, —namely, the rectum.

The foregoing means of relief are applicable to the disease, till the chordee is anticipated, greatly diminished, or gone; and their known medical properties appear well adapted to the most inflammatory stages and states of Gonorrhœa: and having ventured to say so much, I leave the more particular application of them to the discretion of those whose province it is to treat the disease. If my idea be just,—if in Gonorrhœa Virulenta there is a combination of two powers, namely, infection and inflammation,—and if the latter gives energy to the former, the proper management of the inflammatory symptoms must form a very important consideration in the cure. It is only necessary to repeat that they should be suppressed early: and if the practitioner will take, as his principal guides, the habit, the state of the part, the time of the disease, and the season of the year, the means above mentioned will, I trust, be fully sufficient to answer these indications of cure,

According to the existing circumstances he may make choice of two or more parts of the treatment, he may combine them on a large and more extensive scale; and in the short period of a *few* days (if the exigencies of the case should require it) he may take in its several parts. But whether he takes in the whole or a part, all violent exercise should be avoided, lewd ideas should be banished from the mind, and the importance of quietude inculcated, under a cooling and well regulated diet.

There is nothing in the above plan that can have a tendency to stop the discharge in *Gonorrhœa* prematurely; on the contrary, *this* continues in a more mild state than it was before, tending still more to keep down the the future rise of inflammatory symptoms: and, in short, when under such treatment the chordee is fairly gone, the reproduction of the symptoms is not an easy matter, as before;—so powerfully will the natural means of cure operate, after the above treatment, in checking their rise!

Having considered the practice above speci-

fied as applicable during the first and most inflammatory stage of the disease, when the symptoms are increasing in violence progressively, till the Chordee is considerably diminished,—the state of the urethra thenceforwards leads to other indications. If mercury be used either externally or internally, this seems to me the proper period for its exhibition in an inflammatory habit. It may be fairly presumed that it may be employed with more safety and effect under a decreasing than under an increasing inflammation; with more propriety after relaxation has weakened the vessels of the part than when the action of those vessels is hourly getting more violent. In the one state, the stimulus of the medicine would be adding fuel to the fire;—doing more hurt by the irritation it would produce than good as an antivenerereal, ameliorant, or by whatever other principle it may be said to operate, acting with and augmenting the most painful symptoms of the disease. In the other state, its application will commence not only after those symptoms have been fairly lowered, but after a certain degree of relaxation has taken place,

under the kindly influence of the natural means of cure ; I mean, the increased secretion from the urethra.—So that in the one case there is inflammation operating against our endeavours to-relieve by mercury ;—but in the other, relaxation, diminished action, and a lessening irritability of the part, greatly operating in our favour, and counteracting the stimulus of this medicine.

When the inflammatory symptoms are considerably diminished by art and nature, and the disease has reached what I have called the second stage, mercury may, I conceive, even in the most inflammatory habits, be employed with advantage. The urethra is at this period in a state of irritation rather than inflammation ; the discharge is less acrimonious, but still requiring the help of medicine to make it more bland and more concocted. When this state of the disease is neglected, and irritation is long kept up on the part, like a common sore of the skin, it will degenerate into a crude, ill-conditioned kind of excoriation, that may be followed by actual ulceration, tedious gleet, and the healing or contraction of the ulceration,

by stricture. Whoever reflects on the very delicate structure of the urethra, how easily its cells may be injured by long continued inflammation or irritation, will see that these consequences are neither impossible nor improbable. Early attention to the means of relief already mentioned, and adherence to some further observations I shall now make, will obviate these unhappy consequences.

The inflammatory symptoms of the first stage having subsided, and the Chordee diminished or gone, mercury may be immediately exhibited. It may be rubbed in, either to the perinæum, *glans*, or thighs; or it may be taken internally.* And whether it acts by an antivenereal power, or as a promoter of a good and well digested secretion, the fact is, that at this period it tends to shorten the disease. The smallness of the quantity necessary to produce this effect, in some cases, inclines me to believe that it

* I have here mentioned the *glans*, having considered it as a good absorbing surface for mercury, and so it is. But having lately noted even this mode to be hurtful in the true Gonorrhœa, by producing a metastasis to the neck of the bladder, I do not recommend it without some degree of fear and hesitation.

may act rather as one of the pus moventia, than by its antivenereal power.—It is very well known that two or three grains of *Calomel* given every night, for a few nights only, will frequently correct the discharge of internal sores, and make those sores inclined to heal; and mercury seems to have the same effect on the mucus of the urethra that it has on pus. It is of no great consequence in *Gonorrhœa*, whether it acts thus as an ameliorant or antivenereal.—We may be contented to know that it relieves, without diving deeper, it certainly acts both ways. But it would be of great consequence to establish the fact of its ameliorating power on a mucous membrane, for the purpose of applying mercury to some other mucous surfaces.*

There is another observation or two to be made on the subject of mercury in these inflammatory habits. The more perfectly and quickly the painful symptoms are mitigated or removed by a previous cooling, antiphlogistic treat-

* I here allude to some violent catarrhal affections of Snieder's membrane of the throat, and mucous membrane of the lungs, ending too often in pulmonary consumption.

ment, the sooner may this medicine be entered upon, and the shorter will the time of cure be. It may at first be used in a full dose; that dose may be repeated at proper intervals, but it is not necessary to affect the mouth, as in the case of chancre. And though I have mentioned the first part of the second stage as the most favourable for its action, yet when the above plan has produced a certain freedom from the more painful symptoms, the regular progress of the disease being shortened, its application may frequently commence at a more early date. The intervals between the frictions may be long or short, according to the predisposition to a ptyalism; but the quantity used at each friction should be a full one.

But to return.—Even in this state of the urethra a cooling regimen, with quietude, is necessary, although by no means to the same extent as in the preceding stage. There should be an interval of a day or two between the frictions, to prevent an unexpected affection of the mouth, or mercurials internally may be given in small doses; and during their conti-

nuance the warm bath may occasionally be used, both to keep off a local irritation, and to obviate the danger of a ptyalism.*—The bowels must be kept from costiveness, and *Opium* if necessary still continued.—With respect to the exhibition of the latter, it may be employed either internally or externally, either by the mouth or rectum, but at night only. The urethra being now in a state rather of irritation than inflammation, that irritation should not be increased by intemperance, exercise, &c. How far it may be right to persist in a plan approaching to an antiphlogistic one, or to deviate from it, must be left to the practitioner. There is no laying down a ge-

* In every symptom dependent on chancre and its consequences, I have been an advocate for making the mouth sore, and keeping up the affection for a certain time. But except in the instances of chancre at the orifice, within the urethra, or affection of the prostate, this does not appear necessary in *Gonorrhœa Virulenta*. For it is not only a modification of *Lues Venerea* different from chancre, but it is probably a subordinate species of infection—not requiring the same decisive effects of mercury—but no harm can arise from the patient feeling a very slight affection of the mouth.

neral rule applicable to all cases; he must be guided by circumstances, and act accordingly. I must only remark that when the previous treatment, described for the first stage, has been wholly, or almost wholly, neglected, and he is called to direct in the first state of the second stage, he may there, with great propriety, apply an antiphlogistic treatment more liberally, and before he attempts to use mercury. The intention here also is, by a cooling method of treatment, to bring the patient from an irritable and overheated, to a quiet and more secure state, suffering the discharge to take its natural course. .

. If under the above treatment the symptoms are daily declining, and the Chordee gone, the irritability of the membrane (if the habit and other circumstances do not contra-indicate) may be still more diminished by the *Bark*. It may be given in full doses, in quantity from half an ounce to an ounce, in the twenty-four hours. Should there be any circumstances unfavourable to its action, the former means may be continued *alone* till

the Chordee, ardor urinæ, and every other symptom denoting irritation, cease.

In addition to the general plan above specified there are two classes of remedies yet to mention. The one of which has been often, the other seldom, if ever, employed in Gonorrhœa. Although, like other parts of the plan, they may be made to co-operate toward a cure, yet they are in nature distinct from each other, and widely different.—By the one I allude to the various means we have of raising an artificial inflammation and drain in the neighbourhood of the parts affected with irritation and inflammation; by the other, to the internal use of the natural balsams.

With respect to the first.—The well-known facts that the accidental appearance of a hernia humoralis, or the considerable enlargement of a lymphatic gland, checking the progress of the Gonorrhœa, and taking off the inflammation of the urethra in some cases, and the evident tendency these circumstances have towards curing the gonorrhœal affection, shew sufficiently the utility of the practice I am about to propose, and are hints which, though derived

from accident or mismanagement, may lead to further improvement. If more powerful reasons be wanting, such may be drawn from the general and uniform practice of physic, which has been long in possession of a very good and safe way of taking off irritation and inflammation from the internal part by inflaming the skin, and producing a drain externally, as by the common blister; a treatment which in many inflammations stands upon the most solid foundation, not only having place when some of the foregoing remedies have preceded, but having this singular advantage of being applicable, and every way competent to a cure, when these means, from weakness, are inadmissible. Perhaps the nature of Gonorrhœa may be such that *Cantharides* cannot be generally applied during the increase of the inflammatory symptoms, although, I believe, in some habits it may; yet when the tendency to Chordee is over, and rest, with a suitable regimen has been enjoyed, there does not appear to me any valid objection to its use. It is not only more safe, but more effectual when used externally in form of a blister, perinæo, than when given

internally, in the way recommended for Gleet, by the late Dr. Mead. It is perhaps even safer than the free and unqualified exhibition of *Bals. Capiv.*

The means above described have generally answered my purpose fully, without having recourse to the raising of an artificial inflammation; but I am convinced, that there are many circumstances of the disease, in which, if submitted to, it would be of singular utility, by taking off that strong disposition to local irritation in certain parts of the urethra, which keeps up the discharge, and prevents the membrane from re-acquiring its natural healthy tone:—The other powerful means of diverting irritation from the surface of the urethra, namely, by issues and seton, are less exceptionable than blistering, not having the smallest tendency to stimulate the neck of the bladder. And either of them may be applied, with great propriety, in some obstinate cases, where there is a disposition to disease, more particularly if in the membranous part of the urethra, or neck of the bladder; and they will act powerfully in obviating a diseased prostate, by taking off or

rather assisting to take off, the previous inflammatory symptoms, where there is an affection of the prostate from irritation or inflammation without diseased organization.

Of much less power, but of some use in Gonorrhœa, is the external use of *Vol. Alkali*, *Camphor*, *Sp. Vini Rectif.* and the acetous acid. When the disease has been treated from the beginning with the precautions above described, it has hardly ever happened to me that there has been a necessity for having recourse to the natural balsams. I am, notwithstanding, fully convinced that they may be very instrumental in the cure. This class of medicines consists principally of *Bals. Capaiv. Opobalsam, Terebinth. Ven. è Chio, Colophrony, Mastic*, and *G. Guaiacum*.—They have all of them a very considerable degree of power, not only in this disease, but in secretions or discharges from the mucous membrane of the kidneys, ureters, and bladder, of which, were it necessary, many proofs might be produced: but in Gonorrhœa I would confine their application to the middle and last period of its second stage. And they should not, I think, be generally employed in a

full habit, or in large doses, without previous evacuation by bleeding, whether they be given to suppress a Gleet, or at a more early period of the disease. Their general mode of action will not only warrant this doctrine, but points out also the necessity of dilution, demulcents, the warm bath, and opium. They are certainly stimulants, in a very extensive sense of the word. Whoever has given *Bals. Capiv.* in full doses, must have found that, among other effects, it heated the skin and system universally, and in a few cases, when improperly exhibited, it has stimulated the kidneys to such a degree as to produce bloody urine, strangury, &c.

The above mentioned observations are more particularly necessary in the use of this medicine; but they are not the only precautions.—It should not be given largely so as to stop the discharge hastily; and when given even in moderate doses, it should be enveloped in mucilage; and thus managed, the combination will frequently lessen and ameliorate the discharge in a gradual way, without stopping it at once, and without heating the system or kidneys too

much.—There is one part of the action of these medicines which I believe is in a greater or less degree common to them all; but it was from the *Bals. Capaiv.* alone that the fact was taken. I have known it repeatedly given in the most unqualified way, without previous bleeding, without regimen, without dilution, without mucilage, in its crude form of balsam, dropped into water: and it has, in the space of a few hours, taken off the great ardor urinæ in the first stage of a Gonorrhœa, the discharge having been thereby partially or totally checked. And it seemed to have the power of taking off the local irritation in the urethra, principally by raising a general irritation on the skin and other parts of the system. We know that a topical inflammation will sometimes be the crisis and cure of a fever, but the reverse of that proposition seems to take place from the action of this medicine in Gonorrhœa. For the progress of the local symptoms is immediately altered, they take a different course, and the disease seems as if cured by this new, diffused commotion. If it be said that it has also an operation on the mucous membrane of the kid-

neys, ureters, bladder, and urethra, I acknowledge it has; but the above effects it has also produced, when the more partial action of the medicine on these surfaces could not be distinguished. So far from controverting, however, its particular influence on these parts, I am satisfied that long experience has established the efficacy of terebinthinated clysters, before the milder remedies of *Opium*, warm water and oil, were attended to. And that they have relieved in some calculous obstructions of the ureters and kidneys, when assisted by other means, I believe there cannot be the smallest doubt,—and that though the discharge of mucus was considerable: therefore I make no hesitation in saying, the *Bals. Capaiv.* possesses a similar property, but in a superior degree.

Upon the whole, what may be said on the subject of these medicines in *Gonorrhœa* is this:—They are endued with different degrees of power. The *Bals. Capaiv.* and *Opobalsamum*, are the best of the tribe, and in this disease the most efficacious. But they are medicines which should not be used during

the early progress or increase of the inflammatory symptoms, nor till the Chordee has been fairly, or almost entirely removed by other means, lest the discharge should be suddenly checked, and phlegmonous inflammation induced. In the application of these medicines, a great deal must depend on what has been the previous treatment. Under the plan now delineated they may be frequently given with perfect safety and effect, even in a full dose, in the middle period of the last stage. But the safest way is to employ them in moderate doses, with a view to ameliorate and lessen the secretion by degrees, without taking it away at once. I am convinced they have a strong tendency to heal that kind of late excoriation to which the urethra is subject in Gonorrhœa.—Piso, in his natural history of the West Indies,* describes the tree producing the Balsam Capaivi, and his method of using the balsam.—He gave it internally with sugar, or oil, and injected it also into the urethra.—Of this last practice I have had no experience.

* Gulielmi Pisonis, de In iæ utriusque re naturali et medica—p. 118.

The plan of cure contained in the foregoing pages is so far regular that it depends upon no equivocal or uncertain theory. It is founded, first, in the knowledge of the natural history of the disease; secondly, in the known effects of certain medicines; and lastly, the application of these effects, according to the date of the disease and existing circumstances of cases. As a whole it is principally applicable to persons of an inflammatory diathesis, who suffer not only in present, but in future, from the violence with which the disease very frequently proceeds during its most painful stage. There are cases so difficult to conquer that they require a judicious combination of all the most essential parts of this plan; there are others, in which the practice should be modified, and followed with less severity of discipline. If the plan will relieve in the worst and most rebellious, the proper treatment of the milder and more manageable cases of the disease will easily be found; and no great degree of medical erudition is necessary to enable the student to make a proper discrimination.

In the first volume of this work it was

said that chancrous and gonorrhœal infection were sometimes united in the same person, from one and the same connection. Experience every day shews that this double kind of infection does actually take place. In all such cases, as we employ no local means to smother chancrous ulceration, or check the secretion, the true nature of the mixed malady must be soon ascertained; and if chancre be combined with gonorrhœa, it will shew itself, probably, within the time specified for the introduction of mercury in gonorrhœa. —It may therefore be fairly said that this is a safer way of treating the disease, than by any other means whatever *merely local*. In this mode of cure there cannot only be no improper suppression of gonorrhœal, but, what is infinitely of more consequence, no smothering of *chancrous infection*. And if chancre, or chancrous excoriation, should appear during the progress of the gonorrhœa, the free use of mercury must be the remedy, both for alleviating the present, and obviating future consequences.

How useful soever the above general method, either when partially or wholly followed, may be,

I confess it is open to some objections. It is incompatible with a life of pleasure and dissipation. A man with a fever or pleurisy, I have said before, may be prevailed upon to confine himself, to keep quiet, and submit to proper treatment,—not from choice, but necessity, because incapable of much motion or exertion. But as there are no such impediments in gonorrhœa, the above plan, how strongly soever it may be indicated, may not perhaps find, among the majority of the diseased, a ready acquiescence. It requires in its prosecution more steadiness and restraint than they will readily submit to; it may therefore very possibly be neglected, although the propriety and utility of the thing is as clear and demonstrable, *when the urethra is highly inflamed*, as in any other inflammatory disease whatever. For this membrane, and all the parts connected with it, though certainly not so important in the animal economy as the lungs or pleura, are wonderfully delicate in structure, and being naturally so framed, are liable to great injury from inflammation.

All those persons who consider the discharge

not as a symptom, but as the circumstance constituting the disease, will have another objection. They will not be easy till that discharge has ceased; and the sooner this happens, the sooner it is supposed they shall be cured. I wish I could say that such was the general fact. The above method is not to be compared, in point of speedy effect, with some other modes of treatment to be hereafter mentioned, in which local means of cure are employed; because, from the very nature of the above method, its operation, though sure, is somewhat slow. A man who uses an injection over night, may, if he pleases, stop the discharge by the next morning; but no such sudden effect can be expected from this general treatment. I shall hereafter enter at large into the medical properties of some kinds of injection; and if the fact should turn out that the majority of them when employed early rather suppress the symptoms than cure the disease, though such suppression may not lead to consequences truly venereal, they are by no means safe, more especially as they sometimes tend to produce hernia

humoralis, strangury, inflammation in perinæo, &c. and whenever in gonorrhœa there are either chancres or chancrous excoriation, they will certainly tend to produce secondary symptoms of Lues Venerea.

The above method is certainly not liable to any of the accidents attending the suppression of the gonorrhœal discharge, by means simply local. And it is worthy of due consideration in other respects. For it is principally by adopting the principles laid down in this method that local means can be rendered safe and effectual in the first instance. And it is to the same principles, and to the above treatment *alone*, that we must have recourse, when injections have irritated too much, when they suppress the discharge too suddenly or violently, and when inflammatory affections follow such suppression:—a proof sufficiently strong of its extensive utility! If it be the only resource to which we can safely, in case of misfortune from injections, apply; and if the prosecution of it is not open to the same inconveniences,—so is it in many cases,

probably, the most secure method of treatment, when followed from the beginning.

In confirmation of the above doctrine, is it not a matter generally known and acknowledged, that some of the means of cure lately mentioned for Gonorrhœa, will in all catarrhus affections with high inflammation, cure without any injection?—If we except the circumstance that mercury is necessary in Gonorrhœa, and not in these diseases, the great outline of practice must, in many respects, be the same, for the cases are parallel.

When so much is said in favour of the method, or of particular parts of it, the reader will be pleased to remember that it is applicable, as a whole, to the unequivocal Gonorrhœa Virulenta only, in a young or plethoric habit, with all the peculiar circumstances of genuine inflammation. By the term unequivocal, I do not mean every discharge from coition arising upon former injuries in urethræ unsound, or from accidents not venereal; but I mean a disease fully marked, in which, from appearances and symptoms,

no doubt can be entertained of its true character. Many *Gonorrhœæ*, which are supposed to be venereal, are not so, and the discrimination, more particularly at an early period, is sometimes a very nice exercise of the judgment.

To corroborate what has been already enforced, I hope not with too much prolixity, I shall endeavour, in the next place, to illustrate and strengthen the doctrine already laid down, still further, by explaining briefly the treatment of the more common early accidents of the disease. Accidents which never can happen under the general treatment above described, except from an improper suppression of the natural secretion, either through the misconduct of the patient, the injudicious use of *Bals. Capaiv.* or the too prevalent practice of employing without due discrimination both mercurial and sedative injections. And upon tracing back what has been written it will be clearly seen how strongly the practice recommended, in the pages immediately foregoing, tends to shew a method of cure

without the danger of these two truly disagreeable consequences.

First, Hernia humoralis.

The first two things to be attended to in this affection are, an accurate suspension of the testes and scrotum by a proper bag truss, with an horizontal posture. These are so important, as in slight inflammations sometimes to effect a cure almost without medicine; and are on no account ever to be dispensed with.—To these may be added cooling applications to the scrotum, *Cerat. Saturn.*—*Aq. Vegeto Minerale*,—*Acetum*, used cold in form of cataplasm, or applied through the medium of linen, &c. It is common to employ warm cataplasms, with fomentation, in many of these cases; but in the worst and most painful herniæ humorales, the *Acetum*, applied as above, with a little fine oatmeal or farina lini, and sweet oil, has answered my purpose better than any other application. Besides these local means of relief, bleeding, laxatives, a strict regimen as to diet, and the warm bath to relax the ure-

thra and neighbouring parts, and thereby assist in reproducing the discharge, which has been either suppressed or checked, will, during the inflammatory state of the complaint be frequently necessary. The pain being⁴ gone, the inflammation considerably lessened, and discharge returning, mercury may be joined to the other means; and on that I have generally afterwards depended for the further reduction of the tumefied parts, and cessation of the discharge: which discharge should on no account whatever, in my opinion, be stopped by the use of injections, *Bals. Capaiv.* or the cold bath.—Tepid sea-bathing is much more safe and effectual.—In some cases I have known cataplasms and fomentations, in which *Hemlock* was the basis, of singular service, after the removal of the inflammation, both when used alone, and when combined with slight mercurial frictions, to the part or its neighbourhood. —If the hernia humoralis originates in an affection of that part of the urethra where the vasa deferentia open into it, or in any case where the discharge continues obstinate, or in small quantity, without the proper di-

minution of the testis or epididymis, a vesicatory perinæo may become necessary.—After this affection, the tumefied parts seldom return to a state perfectly natural.

The second accident to be mentioned is tenderness and enlargement of the lymphatic glands, proceeding not from absorption of venereal matter, but from the extended irritation and inflammation.

The third, extension of the inflammation from the orifice of the urethra to the neck of the bladder, with a copious virulent discharge.

The fourth, inflammation, extending as in the last case, but with a diminished or suppressed discharge.

The fifth, inflammation in the posterior part of the urethra and neck of the bladder, from metastasis, discharge also suppressed, or considerably lessened.

The sixth, inflammation in perinæo; and,

The seventh accident, inflamed prostate gland.

In each of the above cases, *mutatis mutandis*, the appropriated remedies are the same—anti-

phlogistics, leeches to the hæmorrhoidal vessels, dilution, discutients, warm bath, *Opium* during the inflammatory state; and when that has been sufficiently diminished to render the use of mercury admissible, this specific may be employed either internally, externally, or both ways; but more particularly in the last case, that of inflamed prostate, it should be used freely, both as an antivenereal and powerful deobstruent. If the mercury be urged even to a slight affection of the mouth, in all these cases it can do no harm, and may do much good.

The discharge, be it more or less, during the whole progress of the disease must here also be left to nature, and the general effects of the means of cure.

When after the use of mercury the cure does not proceed in a favourable manner, the epispastic when applied to the perinæum may have the happiest effect, not only in shortening the disease, but in preventing other consequences, as tedious Gleet, Stricture,* &c.—

* The accidents here detailed may be the consequences of inflammation neglected, irregularities on the side of the

and the excoriation may be kept up for some days.*

In the last five described cases, we have frequently not only a very painful dysury, but a difficulty of making water, almost amounting to a suppression, or, what is perhaps a more expressive word, a retention of urine; and the transition from this to an actual *retention*, is extremely easy, and may be readily produced by irregularity or mismanagement, more particularly where, at a former period, there have been strictures, or affections of the neck of the bladder; and in no case whatever are evacuations more strongly indicated, as a foundation for the cooling, relaxing, anodyne treatment, which is to follow, than this. In no case is it more necessary to combine the different parts of the antiphlogistic treatment speedily

patient; or they may arise from injections too stimulating, or too sedative; two very dangerous extremes! By the general treatment above mentioned, as there can be no suppression of the gonorrhœal discharge, nor irritation extraneous to the disease, these distressing affections do not follow, and never can take place but from inattention.

* For a more particular account of the various means of relief applicable to these cases, see our general method.

and judiciously with that relaxation which is producible by opium and warm water ; nor in any are there stronger reasons for the most early application of the proper means of relief, to obviate the alarming consequences of a tense, inflamed bladder.—These precautions are more particularly worthy attention, from this further consideration—that when a suppression or retention happens in any of the above situations, it is not simply a suppression or retention to be presently and safely removed, as in some old men given to drinking, by the immediate or frequent introduction of a bougie or catheter, but it is a retention wherein the bladder suffers not only from distention, but from irritation and inflammation having extended themselves to it ; which retention is literally the consequence of a previous and still subsisting disease in the urethra, rendered throughout extremely tender and painful, and likely but ill to bear the introduction of either bougie or catheter. When retention takes place here, we have two distinct causes of mischief—the original disease, namely, the Gonorrhœa, which is still going on ; and a secondary one arising from distention, con

traction, and inflammation of the bladder itself. Such being the state of the case, it is evident that the proper means of preventing this alarming symptom can only be obtained by combining the above remedies, employing them sufficiently soon, and centering their effects, to counteract the rapidity of the disease and symptoms within as short a space of time as possible.

There is a point of time when the secondary affection (the distended bladder) may become the object of most attention, and require the cautious introduction of a small bougie, of a hollow bougie of the elastic kind, or of a flexible or common catheter;—of these instruments the first two are to be preferred. But when this is absolutely necessary, it must be obvious that the above previous treatment, although in particular instances it may fail in preventing the retention, yet it is the only means in our power of rendering the passage of a bougie or catheter tolerably safe. And it is equally clear that our general remedies before recited must be the best sheet-anchor: for the operation of a bougie or catheter can go only to the single

circumstance of unloading the bladder. They are not only no remedies for the disease, but the introduction of them is frequently attended with pain, and sometimes with difficulty; and if the attempt to pass them fails, or much force is used, they may do mischief, and aggravate all the symptoms. The true cure of the primary disease, and of the retention of urine, which is its consequence, may most frequently be obtained by the means above mentioned; which, if used in time and with proper steadiness, I am confident would render the introduction of a bougie or catheter frequently unnecessary; and certainly, under the above circumstances, they should, if possible, be avoided.

To consider this matter of suppression or retention a little more fully, without enlarging further on it as a consequence or secondary symptom, whether arising from the extension of inflammation, metastasis, sympathy, or consent of parts, I shall first endeavour to shew the circumstances of such retention more particularly, and the operation of the general means of relief now recommended, as far as I have

hitherto ascertained them.—Whenever, in diseases affecting the bladder, a strong disposition to contraction takes place in its muscular fibres, whether there be much or but little urine contained in it, pain arises.—We find the pain and contraction great in the stone, and some other diseases, although the quantity of urine contained be small. With this kind of contraction we have here nothing to do. But in this retention of urine, pain arises principally from over distention of the bladder, which is an organ able to contain naturally a considerable but uncertain quantity of urine without the sensation of pain, but no more : and the quantity it is capable of containing without pain depends on the irritability of the bladder, and its greater or less disposition to contract at the time ;—the continuance of the pain and contractions together producing inflammation. Upon these grounds the action of the remedies above mentioned may be accounted for in the case of a loaded bladder. The disposition to contraction is first weakened by the evacuations, it is still more diminished by the relaxing power of the warm bath, and the anodyne, antispasmodic

influence of *Opium*: and the bladder, after suffering more or less distention, is brought into an atonic state. Its muscular powers no longer contract with the usual force on the contained fluid, and the sphincter becomes incapable of action, when, for a short time, the urine passes away slowly by drops, without the patient being able to prevent it; and thus the bladder is gradually unloaded,—ease and relaxation succeeding to pain and contraction. But to produce this happy effect, the evacuations, warm bath, and opiates, should be embraced as a combination of remedies, all tending to the same end; and in use so quickly made to follow each other as to co-operate. This disease being rapid in its progress, and, if not speedily removed, too often fatal in the event, requires the concurrence of all these powerful means of cure, no one being effectual enough to answer singly.

The involuntary dribbling of urine, which is frequently observable when the requisite degree of weakness and relaxation of the muscular powers of the bladder has been produced by medicine, strongly incline me to believe that

in cases of great danger another remedy might be added to the above combination ;—I mean, an infusion of the leaves, or the fumes of *Tobacco*, in forma enematis. For the degree of relaxation these occasion when exhibited in strangulated herniæ is not only sudden, that is, produced within a very short space of time, but extremely great.

Whenever the tension and inflammation of the bladder are pressing, and this mischief becomes the principal disease, and first object of attention,—and there is not sufficient time for the due operation of the whole of the above means,—as a lesser evil must always give way to a greater, an attempt to draw off the urine must be made. But even here there will always be a sufficient time for bleeding ; and this alone may lessen the contraction, and facilitate the introduction of a very small bougie, or a hollow one of the elastic kind. I say lessen the contraction, for there not only exists this disposition in the bladder, but in the urethra itself. If the business can be done by a hollow elastic bougie, with a piece of whalebone as a stilet, or without the stilet, it may possibly

pass as a common bougie, with less difficulty and pain to the patient than a flexible, or common catheter. But if the water cannot be drawn off by this means, a catheter may be used.

It may happen, that although the retention be relieved by the above general means and the aid of a hollow bougie or catheter, yet the bladder not having recovered perfectly its lost tone, cannot do the office of discharging its contents properly, in which case a portion of fluid still lodging, though perhaps it may not be great, will tend to keep up the irritation already subsisting; and if, under the relaxation produced by the previous treatment, such circumstance can be rendered less distressing by discharging from time to time even a moderate portion of urine, and the introduction of the instrument can be made with ease, the practice may be vindicable: but there must be the circumstances of retention and imperfect evacuation of the bladder to warrant it.—As a general rule it may be noted, that a relaxed state of the parts is always most favourable for the introduc

tion of these instruments ; and its contrary, a state of contraction and inflammation, unfavourable.

Abscess in perinæo.

The prevention of this affection may easily be accomplished by the means which have already been fully explained : but when these have been neglected a suppuration sometimes takes place. Although this suppuration shews itself externally, yet the origin of it is in the urethra itself ; the common integuments exterior to it suffering often to a considerable extent. It has been a practice generally adopted, and I think very properly, to open these abscesses early, as soon as a fluctuation can be fairly perceived under the finger, without waiting for a more complete suppuration, or for the tumor making what is called a point. When opened, the extent of the cavity must direct what is next to be done ; and, in general, when such a cavity is large, the integuments may be freely divided. The contents of the abscess are generally matter and urine,

which evidently denote a breach in some part of the urethra. This breach may be in one or more places, or a certain portion of the urethra may have sloughed, and the opening such abscesses early has been more particularly recommended with a view to obviate this last accident. A large and free division I conceive is frequently necessary to enable the surgeon to incise from the bottom, to trace the breach in the urethra, or to discover any deeper seated lodgment of matter that may have taken place; and it will in the course of the treatment be of this further use, where a breach exists, though it cannot be seen or discovered, and when no lodgment has been formed, it will enable him, after a certain time, to employ such topics as have a power of producing healthy granulations in all sores, and a disposition to heal. The topics I have used, with no small advantage, have been the *Cerat. Rub.**

* In the composition of this application, the *Præcip* should be levigated very fine, and mixed in small proportion with a stiff well made cerate. The first and most obvious effect of such an application to a common sore is to coagulate or thicken the discharge;—the next, to produce

or lint dipped in a weak solution of *Argent. Nitrat.* in water. That disposition once produced in the general sore will, I have experienced, often extend farther than the eye can reach, even to the breach itself, and greatly assist the action of the bougie in healing it.

When, in consequence of matter having formed, an opening has been made, for a few days the treatment should be principally to allay irritation and pain, and quiet the general disturbance of the system by *Bark, Opium*, a soft easy dressing, &c. with the most perfect quietude. When the urethra is so far returned to its natural state as to bear the introduction of the bougie, let that be passed, and kept in as long as the patient can bear it, daily or twice a day, according to the irritability of the urethra; and if the general state of the patient

healthy granulations, and a disposition favourable to healing. —The *Ung. Citrin.* used in due proportion, and mixed with *White Cerate* will answer the same purpose. It has been lately a practice to use the bougie armed with *Lunar Caustic*, and I have reason to believe it has a strong tendency to heal the internal breach.

will admit of his taking a mercurial internally, it may be given as an alterative, and one of the *pus moventia*. When the sore has contracted to a small size, if there should be reason to suspect, from a small discharge of urine appearing now and then, that the breach in the urethra is not perfectly closed, it may be worth the trial to apply *Emp. Epispast.* perinæo, guarding the sore carefully from the action of the *Cantharides*, and for a short time discontinuing the bougie and other topics.

It is very possible that after the above treatment this artificial inflammation may be powerfully assistant to the cure of the disease, and I am much mistaken if I have not known it have that effect. In such case, probably by a new and that a very powerful action taking place externally, the irritation within ceases, and the opening in the urethra heals. Under the above circumstances, the point of time for the application of the *Epispastic* seems to be that now specified; but in some other cases of abscess in perinæo it may be applied much more early, as in those in which a mere puncture is sufficient to discharge the matter and water

contained within the cavity. From some late instances of the success of blistering, after the opening of abscesses in tendinous parts, and even during the formation of matter, as lately happened to me in an external suppuration, the consequence of a neglected accident to the joint of the knee, I have the strongest reason to believe that it may not only be employed after a considerable abscess in perinæo has been opened by puncture, but that it may sometimes supersede the making any opening; for in the suppuration of the knee above mentioned, it seemed to increase absorption, and caused a palpable exsudation of the matter under the integuments, without the necessity of making any opening; and by this single application the suppurated fluid and general tumefaction of the whole joint, which was great and alarming, soon disappeared.

The greatest objection seems to be the danger of the *Cantharides* affecting the neck of the bladder; but when there is no such probable predisposition, or when that circumstance can be counteracted by dilution and the warm bath, I am convinced it may be

employed with great advantage. In all internal inflammations, when evacuations and other antiphlogistic means cease to have beneficial effects, or from great weakness are inadmissible, it is well known that blisters are highly useful, carrying on the desired resolution by the new inflammation they raise, and the discharge thence produced from the skin; and their utility in many cases of irritation and inflammation in the urethra is to me no less apparent. Nor, as has been already said, do their good effects end here, but they are applicable even when inflammation has terminated in suppuration, and afterwards.

We frequently meet with a small collection of fluid, partly urine, and partly pus, in the perinæum, arising from stricture, even during the use of a bougie, in which the progress to suppuration is slow, the inflammation sluggish, and the tumor more circumscribed than in the last mentioned case. This kind of abscess is preceded by general uneasiness and tenderness, teasing the patient for some time, without much pain. Here the vesicatory to the part will be a very

probable means of removing the uneasiness at its access, and preventing the collection; of producing the absorption of the fluid when collected, and of consolidating the cavity when such fluid has been discharged by puncture, more especially where the passage has been gradually dilated by a bougie. Indeed, in many instances the operation of the bougie alone will answer without it, these suppurations healing under its use; but whenever two means can be rationally directed to the same end, much benefit in all cases may arise from the co-operation.

Where there exists a stricture, the utility of a bougie is sufficiently evident; when an abscess in perinæo is complicated with a stricture, it is as necessary, because the stricture remains. But it may be asked, why is a man having an abscess in perinæo with a breach in the urethra, but without stricture, to submit to the same discipline? To this I answer, that the bougie is necessary to prevent the passage of the urine through the opening in the urethra, and thereby to promote its healing, the passage of the urine in micturition keeping the sore open.

But a bougie in order to this, it will be said, should be kept in for a long time, bringing the patient to bear this by degrees: it should be hollow, to admit the passage of the urine, as a catheter, through it; and he should, as seldom as possible, do, what all persons who use a bougie are too frequently obliged to do, take it out whenever they have an inclination to make water:—that a bougie is an extraneous body within the urethra, and may therefore possibly prevent the healing of the sore by the irritation it has produced; that even the æsophagus may be opened by an abscess, and fluids pass freely through that opening, and yet such opening heals by attention to general health, and the most superficial treatment. And that, after the operation for the stone, we do not generally employ a bougie to prevent a fistula, although there is frequently great laceration of parts, and separation of sloughs; whilst the urine is daily washing every part of the sore.—It is not impossible but we may rely too much on art, and too little on nature, in abscesses of the perinæum. We know, in-

deed, what may be done by the assistance of the bougie, and its effects are not always the most flattering; but we know not what may be done without it. I submit, therefore, with great diffidence, as matter for future inquiry, where the breach in the urethra has been large, perhaps from the sloughing of a portion of that membrane, and where the passage of a bougie is from those circumstances very liable to take a wrong direction (in which case it must certainly do mischief) whether the same treatment as after the stone may not be better than any attempt to cure such considerable breach by the assistance of a bougie? Or whether, if a bougie be necessary ultimately, we ought not first to see how far nature will go, when assisted by an internal treatment, towards the accomplishment of her own work?

The fact perhaps is, that generally in these abscesses the foundation has been laid in a previous disposition to stricture. We have very few instances of abscesses in perinæo without it. For the stricture the bougie is one of the remedies; and when that becomes com-

plicated with an abscess, it is a powerful means of relieving that also,—But there are other reasons why a bougie may be necessary. It may be said to act two ways, either mechanically or medicinally, according to the substances which enter into the composition. A bougie of whalebone, of catgut, of the elastic gum, or of prepared paper or leather, were it possible to manufacture these substances so as to give the necessary properties of firmness, flexibility, and smoothness, would all act mechanically, gradually dilating, and from their mere stimulus in the urethra as extraneous bodies, producing increased secretion: and, perhaps, a bougie well made, and acting simply in this way, would be preferable to every other. But the ideas of our ancestors, and some modern surgeons, have gone much farther. They have concluded that bougies should be medicated, should be made of plaster of a due consistency, and of rag, rolled up into a cylindrical, conical, or other form; and from the nature of the ingredients in the composition of the plaster, the bougie was supposed to have certain

sanative properties: *Mercur. Nitrat. Rub.* finely levigated,—*Crude Mercury*,—*Prepared Antimony*,—*Litharge*, *Wax*, and *Emp. Mucilag.* &c. have been employed for this purpose. It has been imagined that these bougies, in order to have the best effect in diseases of the urethra, should have the power of producing a kind of suppuration, or laudable increased secretion from the mucous surface of the urethra, and that on this power a great deal of their efficacy depended; and provided they do not cause a solutio continui, where there is none naturally, and where there ought to be none, nor stimulate too much, the idea is not to be discarded too hastily. The least stimulating bougie of the plaster kind is that where the *Empl. Commun.* forms the basis; but from the great quantity of *Litharge* in its composition, this must, in some measure, act as an astringent sedative. It may be a good bougie for an obstinate gleet, but not so good for a stricture, because it probably will tend to check the suppuration, and lessen the secretion. It certainly irritates less than most others; but I conceive that the addition of

Crude Mercury would make a better composition. We now are well informed of how much utility drains in the neighbourhood of diseased parts are, as in the paralysis of the lower extremities, from diseased spine; in diseased hips, &c.—I am convinced, the same principle, to a certain degree, may be extended to these cases of stricture, and even to fistulæ in perinæo;—and that the general discharge produced is one of the circumstances on which the action of a bougie depends, and the other (when the bougie is medicated) is its effect as one of the *pus moventia*, and that it is capable of exciting internally the same disposition to heal, in an opening from the urethra, as we have said was producible by the external use of the *Cerat. cum Merc. Nitrat. Rub.*—and *Ung. Hydrarg. Nitrat.*—and this last may, when considerably lowered, very probably be attended with good effects, if applied by means of a bougie to the urethra itself, not only in the abscess perinæo, but in some other cases; *Calomelas* and *Calx. Hydrarg. Alt.* may be employed for the same purposes. A

very weak solution of *Hydrarg. Muriatus*, in water, mixed up with cerate, or *Axung.*—as in making soft pomatum, when smeared on a common bougie, may have a similar good effect. Externally, they are not only promoters of good suppuration, but have considerable efficacy in correcting those defæcations of the skin called scorbutic; and thus, by means of a bougie, the local action of mercury may be extended to distant parts of the urethra, where the syringe cannot possibly reach.—When there is a troublesome gleet, with a concentration of disease to any one particular part of the urethra, more especially if 'out of the reach of a syringe, far down in the passage, or in the perinæum, try the external use of mercury, *Bals. Capiv.* internally, with the precautions formerly mentioned; and if these fail raising an external inflammation or drain by means of the *Epispastic*, and the use of a bougie, either partially or fairly introduced, and worn for a shorter or greater length of time daily, according to the state of irritability of the urethra, under the most perfect quietude and deli-

cate management, will bid fair to have a good effect.*

We sometimes meet with a troublesome heat taking place throughout the greater part of the passage, long after the *Gonorrhœa* has disappeared: if not attended with stricture, this is probably a scorbutic affection.—The warm sea bath, or a common warm bath, the external use of mercury, a medicated bougie to produce a discharge, and correct the local acrimony, raising externally inflammation and drain, are means very likely to succeed; and if any mercury be used internally, it should be an alterative, or mercurial salt diluted, as in the solution of the *Hydrarg. Muriat.* &c.

I am now come to the *second* method of cure, in *Gonorrhœa*, and shall endeavour to point out the circumstances in which the disease may be treated by mercury alone; also, without injection.—Having, in the foregoing method,

* Since writing the above, many very important facts have come out respecting the treatment of Strictures, &c. some of which will be hereafter noted. I was unwilling to break the chain of effects from a *Gonorrhœa* badly conducted, to its consequences just described. But shall resume the subject hereafter.

shewn how it may be counteracted and cured, where there is high local inflammation, and in habits where a disposition to inflammatory diathesis prevails,—another general method of treatment is to be described, infinitely more simple than the preceding, which has very often succeeded under opposite circumstances, that is, in constitutions rather phlegmatic than inflammatory, without or with a very slight attendant inflammation. It is very extraordinary, but it is a truth, that in the same specific complaint, produced precisely in the same way in both, we find great tendency to inflammation in one habit, and little or no disposition to inflammation in another; and there are, besides this, many intermediate shades or varieties.

In the habit directly opposite to the inflammatory, the smallest doses of mercury, in any active form, continued for three or four weeks, or even for a much less time, in an alterative way, without affecting the mouth,—if they have not cured, have at least thus far assisted nature, that the secretion going on has gradually thickened and been amended, the symp-

toms have been kept under, and the disease at length cured. I cannot say how it acts in these cases, whether as one of the *pus moventia*, or as an antivenereal; the fact I know, and innumerable instances of cures thus obtained might be adduced. The *Pil. Alterat. Plumm.*—small doses of *Calomelas*,—*Hydrarg. Calcin.*—*Elect. Specific. Nosocom. St. Bartholom.*—all the very active saline preparations of mercury, largely diluted with water, and some others, have, under the kindly influence of the natural secretion, in habits so favourable to the operation of this stimulant, cured the disease. *Solut. Sublim.* and *Ward's drops*, as being more readily diffusible throughout the system, and passing off more readily by the kidneys, and thence to the bladder and urethra, may perhaps be preferable to the more gross preparations of mercury. The truth is, where there is no impediment in the way from inflammation, or inflammatory diathesis, there is no great difficulty in the business. Although such habits do not, generally speaking, require an antiphlogistic treatment, yet an open belly, —the warm bath,—*Opium*,—and sometimes

the *Cortex*, will be necessary to assist the effects of mercury, or lessen irritation. For the knowledge of the fact that mercury will, in this manner, relieve, is not altogether sufficient; and the present improved state of medicine, by combining other effects, all tending to the same curative indication, will enable the student to reach his object by a shorter route.

When the habit is as above, and the patient (to use the language of the ingenious Boerhaave) of a lax fibre, either without inflammation, or with an inflammation of a slight erysipelatous kind, in such case I have frequently found the *Cortex* a sovereign remedy in quieting the local irritation, whether used alone, or in combination with other means conducive to the same end. It should be given freely; and seems to act most successfully when the secretion is copious, and suffered to continue without any local check; under these circumstances I have employed it, even when the prostate itself has been affected with irritation, and with the happiest effect.

It is unnecessary to enter into the different

variations of habit, between this now described, and that heretofore mentioned, in which a rigid antiphlogistic course was necessary.

The reader being furnished with the foregoing preliminary observations, is prepared, in some measure, to understand the conveniencies and inconveniencies of injection; I shall now, therefore, go on to the *third general division*, and endeavour to describe various ways of treating this disease by injection.—The two former methods were so far general, that no local means were used to check the discharge; nor was the surface of the urethra directly affected by any application.

In the former part of this work I expressed an opinion that the action of the venereal poison upon its insertion, was like the variolous, instantaneous. Having myself had considerable experience in the Suttonian method of inoculating for the Small-Pox;—having frequently observed that the practice was to take the infecting fluid from the inoculated arm, in the presence of the infecting person;—and having in a long course of practice never seen an in-

stance of infection in the natural way to the inoculated person, from the effluvia of the arm, during the time of taking the matter from the infector, or from the patient himself (as is frequently the case) examining the puncture immediately, or soon after the insertion of the poison, I concluded that the rudiment or germen of disease acted immediately on the part into which it was inserted, and that after such action, no further accumulation or danger of infection could possibly arise, either from the natural infection or a subsequent inoculation.—Such having been my sentiments, I was, in a conversation with a medical friend,* much pleased to learn, what I did not before know, that the opinion was capable of further illustration; for there appears directly after inoculation for the Small-Pox, when the disease takes place, an alteration in the punctured part so strong and remarkable, that any person who has once seen it, may, with certainty, pronounce whether the infection has been effectual or not.—This gentleman had observed,

* Mr. Joseph Bell, of High Wycomb.

that the action of the poison was as instantaneous as the well-known effect from the sting of a nettle, and the appearance of the part not much unlike it. The part punctur'd seems to attract the variolous fluid, the edges of the little wound are puckered, and the natural colour of the skin altered by an orange-coloured kind of stain, *and that immediately*.—If this fact may be depended upon, (and I believe it may,) I make no hesitation in saying, I know of no arguments taken from the human body that can set aside our former idea, that the venereal poison, like the variolous, came into action, and was probably absorbed from the moment of insertion.* A Chancre is the effect of inoculation with venereal matter. If the variolous matter acts so suddenly as we have supposed, and is capable of assuring the constitution immediately from the natural disease, it must be not only instantaneously absorbed, but must pervade every part of the system with

* In further confirmation of this opinion, are there not in the torrid zone serpents whose poison is still more evident as to its local effects. Death, from the virulency and rapid progress of the infection, taking place in a few hours ?

the velocity of the electric fluid. The course of the lymph is probably not so quick as this, but the progress of the nervous influence may. As I do not conceive that the application of a caustic, or astringent sedative, to the infected arm, can prevent the disease happening from the insertion of the small-pox matter, so neither can I believe that the same topics will have any other than a local effect, or prevent the future rise of symptoms, after the inoculation of chancrous matter.

I have, more than once, in the course of the present work endeavoured to call the reader's attention to that mixed kind of infection, or combination, in which both chancre and gonorrhœa appear within a few days of each other, from one and the same infecting person; the gonorrhœa taking the lead, and the chancre or chancres shewing themselves afterwards. Of this fact I believe there can be no doubt. Its frequency or infrequency is one thing, and the influence it should have in directing our practice is another. If it happens once out of twenty cases,

it is an object of some importance, and worthy an inquiry, whether the prevalent methods of using astringent sedative, and mercurial injections, early in gonorrhœa, may not have a tendency, by smothering chancreous infection for a time, to produce future symptoms of Lues. I think it most probable, wherever on the surface of the glans or prepuce there are one or more points containing the rudiments of a chancre, that in many of these cases, from the contact and known effects of some injections, such rudiments may be checked in their progress, or wholly destroyed, and venereal matter thus go on into the circulation, and there produce its effects, without any perceptible local appearance. A circumstance so strong, and so powerfully dissuasive, that it amounts, I fear, to the rejection of all astringent sedative and mercurial topics, early in gonorrhœa.

In answer to this, I know it will be said, that the combination above alluded to is neither constant nor common:—why deprive us of a set of remedies which, in the majority

of gonorrhœa, are of singular service, because in one case out of many, the consequences you have stated may follow? To this I can only say, I would not willingly do harm, even to have good follow, when the doing harm may be prevented. A steady practice meets with no difficulties of this kind; and should be unexceptionable as to the important article of suppressing such a disease as Syphilis. The outline of such a practice I have endeavoured to give in our first and second general methods.

But the above is not the only objection. For in that species of gonorrhœa where a disposition to metastasis exists early in the disease, as in a case formerly given, here also the use of injections of a specific or astringent sedative kind may do mischief; not by smothering venereal infection, as in the preceding case, but by transferring inflammation, and the gonorrhœal disposition, to the posterior parts of the urethra and neck of the bladder. If we could always discriminate, *à priori*, between those persons with gonorrhœa, who generally have the disposi-

tion to metastasis, and those who have not, we might direct the use of injections with less danger.—As to this matter I can only say I would never employ such early in the disease, where the discharge is copious, the glans penis very moist, or prepuce tight; not only because such a subject has naturally a tendency to absorb the poison quickly, but is predisposed to have the skin crack almost in every connection, and is, moreover, most prone to chancrous excoriation; and, if I mistake not, also to that early tendency to metastasis above alluded to.*

When it may be suspected from the great general inflammation in the progress of gonorrhœa, or in any of its states, that a disposition to metastasis prevails, there also astringent sedative, and all other injections which suddenly stop the discharge, may do hurt, by transferring the disease to a remote quarter. In every case where it can be discovered that there has been a stricture, although that stricture may have been formerly removed by a

* See the natural history of gonorrhœa in the former volume.

bougie; and in all those in which has been a hernia humoralis, an affection of the membranous part of the urethra, or of the neck of the bladder or prostate,—I say, in all these cases when a recent gonorrhœa supervenes, more especially if it be attended with considerable inflammation, the administration of the usual astringent sedative, or mercurial injections, requires great circumspection. On the other hand, when the above circumstances do not stand in the way; when, from the natural state of the glans and prepuce, there is no tendency to local irritability, tenderness, or great porosity, the patient having a firm cuticle, and a short retracting prepuce, with a recent gonorrhœa not fully formed, here the difficulties are not so great, nor the chancre or chancrous infection so probable; but I must remark, that even in the subsequent inflammatory stage of such a gonorrhœa as this, when the tendency to phlegmonous inflammation is strong, and the increased secretion lessened, or even when the secretion is considerable, and the disease approaching to its acmé, here also injections, whether they be sti-

mulating, astringent sedative, or mercurial, are by no means eligible. In the first stage of gonorrhœa, however, when that has been attended with but slight inflammation, and in which there has been no tendency to metastasis, nor to the other circumstances predisposing to the early accidents of the disease, they have been frequently employed with success, and that without much regard to regimen, or an internal treatment, and without any of those helps which have elsewhere been said to be necessary in the cure of this disease.

My opinion is that no astringent sedative, nor any mercurial acting sedatively should ever be employed early in *Gonorrhœa Virulenta*, more especially when injections of this kind put a total, or almost total stop to the running. It is very possible to manage both kinds, so that they may act only as moderators of irritation, without checking the secretion, so far as to deprive the patient of the advantages derivable from the natural means of cure. But the safer way is to omit them entirely—during the early and inflammatory

stages of the disease,—for amidst the great number of persons who make use of injections this distinction is too little attended to;—the putting a stop to the discharge being their object, upon which so much reliance has been placed, as to induce a belief that the suppression was the actual cure of the disease—which is by no means the fact.

There are other injections endued with very different properties from the foregoing, having a disposition to stimulate and increase the discharge. These, when the inflammation is not too great, may sometimes be employed to advantage. And there are again other injections which may be said to hold a middle kind of place, being neither strongly sedative nor very stimulating, and these probably are the safest and best for general use.

The principal astringent sedatives are, *Cerrussa Acetata*,—*Aqua Lithargyri Acetati*,—and *Zincus Vitriolatus*. As the basis of injections, these medicines have been frequently employed; I fear sometimes in too rude a manner and in proportions much too large for the

quantity of water. What we particularly want from them in gonorrhœa is, their sedative without their astringent effects. But this is no easy matter to obtain. And, indeed, the same injection in different urethræ, and at different periods in the same urethra, will have very different effects. The safest and best way, I apprehend, is to begin with a very small quantity, so that the vehicle be but slightly impregnated with the menstruum, to filter the mixture or solution through paper, and to increase its strength, when necessary, by degrees.

The state of the secretion, &c., in the use of these injections should regulate the surgeon's conduct, and he should consider the discharge as the *vis medicatrix naturæ*, which he may moderate, but not wholly suppress. —Astruc, when he found from the great acrimony and quantity of the secretion in an obstinate gonorrhœa that his general method did not succeed, employed the *Cerussa Acetata* in an injection. If he used it as a sedative merely, it might no doubt be serviceable; but he probably employed it in the common way,

without making any distinction between its sedative and astringent properties.—Some stimulating injections are mercurial, others are not. The efficient medicines of the mercurial kind are *Hydrarg. muriat.*—*Hydrarg. nitr. rub.*—and *Calx. hydrarg. alb.*

The first two of these preparations are so stimulating that the one in its crude state is a caustic, and the other an escarotic; and they can only be made bearable in the urethra by large dilution, by enveloping them in *Cerate Mucilage*, or, as in making a medicated bougie, sheathing their particles with plaster, and using them in very small quantities.

Hydrarg. Mur.

This soon after its introduction into practice internally, by the late Baron Van Swieten in his celebrated solution, was employed as an injection very largely diluted in water; and I believe the first person who used it in this manner was the late Dr. Brookes, but he confined the application to females. It has since been, with some surgeons, a fa-

vourite injection for the gonorrhœa in men.

—When the strength of the solution is, as in the above astringent sedatives, properly adjusted to the different circumstances of the urethra, it is certainly a safer and much better topic; and if we set aside its tendency, as a mercurial, to check chancrous infection (an inconvenience, I must repeat, which pervades most of the injections in use) it can do no great harm in gonorrhœa, but as a stimulant. It may, when too irritating, increase the subsisting inflammation; but when the solution is sufficiently weak, it cannot do near so much mischief as an astringent sedative. It may be dissolved in brandy, or proof spirit, and afterwards a small quantity of the solution, according to its strength,⁷ be dropped into water, or it may be dissolved in boiling water; when cold, the solution may be filtered, and kept for use.

As a topic, it is an antivenereal; for Van Swieten's solution will take away venereal excrescences: it is an ameliorant, because when applied to a common sore it promotes a good digestion. It is very efficacious in

the Tinea, and in some other defædations of the skin; and when it stimulates moderately, it not only corrects, but assists in clearing away the virulent discharge in gonorrhœa. I have an idea this medicine may be so very much diluted, that without having any sensible stimulating effect, it may be an excellent corrector of acrimony, and on that principle alone highly serviceable in gonorrhœa. When not sufficiently diluted it may be too stimulating, and increase the inflammation, but when lowered to the proper point it will act sedatively, as calomel; which is also a combination of mercury with the same acid, (the muriatic) but deprived of its acrimony, by repeated sublimations. Calomel therefore is a safer and better medicine, even when made the basis of an injection.—Our ancestors have taken an infinite deal of pains to make the preparation of mercury, with the muriatic acid in this form, less acrimonious than corrosive sublimate. When used as an injection, it is more strongly sedative than the weakest solution of sublimate, and less irritating!

This preparation of mercury, when in a state of solution in water, has been used very frequently as a preventive; with what degree of propriety or success I cannot say. If this kind of practice could prevent the receipt of a gonorrhœa, it would be something: but if it has the power of healing an incipient chancre, immediately after the deposition of the poison by inoculation, that poison having entered not only into the part, but into the habit,—though it may cure the chancre, it can have no effect on the general disease which will follow, and therefore must do mischief. For the last few years I have seen a greater proportion of venereal cases where buboes have been the first symptoms than I ever remember to have observed at any other period of my life; and I attribute the circumstance to the practice now mentioned. There are many who, upon the slightest suspicion of gonorrhœal infection, have recourse to a weak injection of the *Hydrarg. Muriat.* even before the disease can be said to be fairly formed, and by taking it thus early entertain an idea that they can

effect a speedy cure. This may perhaps be true; but when appearances are equivocal, and the nature of the disease not certain, to call the complaint a *Gonorrhœa Virulenta* is to give it too hard a name. The success attending it may possibly warrant the adoption of the practice, but it can be no excuse for taking one thing for another; and the fact, I believe, is, that many of these fortunate cases are gonorrhœæ, but not of the virulent kind. The good effects of this injection are by no means constant; they frequently do, but they sometimes do not answer. It is, however, a neat and elegant way of employing mercury to the urethra in this disease, and well worth future consideration as to its immediate and ultimate effects.

Hydrarg. Nitrat. Rub.

This application, how finely soever it may be levigated, is much too stimulating and too difficult of solution to be employed in a liquid form. It was, however, applied to the urethra by Vigo. Upon the principle he had recommended it to chancrous and other ob-

stinate sores externally, he used it to what he conceived was an internal ulceration of the urethra; and a small quantity of it, mixed with a large proportion of hard cerate, and applied with a tent, may, I have no doubt, be safely introduced to a certain distance within the orifice of the urethra, and there exert its well known digestive power. But I have had no experience of this preparation in gonorrhœa.

Calx Hydrarg. Alb.

This medicine is not only a stimulant, but a powerful antivenereal. It is the mercurial by which, in the smallest doses, when given internally, salivation has been raised, and the effects of its external application in tinea, in the itch, and other affections of the skin, are striking. In a crude state, mixed with water or with any thing unctuous, it shews none of those violent effects, even when used in considerable quantity, that the foregoing preparations do. It is neither a caustic nor an escarotic, but when applied to the urethra it increases the discharge as a stimulant, with-

out having a sedative tendency. From these properties it is a very good injection when mixed with water, or covered with *Mucilage*; and has every other quality of mercury.

The stimulants not mercurial are, *solution of Calx cum Kali Puro* and *Argentum Nitratum*.

The learned and very respectable Dr. Fordyce* has made some ingenious and excellent observations on the use of the former of these medicines in gonorrhœa. The caustic when properly lowered is supposed to act chymically on the mucus, to detach it from the surface, promote the secretion, and thereby evacuate the venereal matter; and there can be no doubt, if the solution be so managed as to increase the discharge without irritating too much, or raising inflammation, it may be highly useful.

Argent. Nitrat.

Fifty years ago an East-India surgeon, with whom I was intimately acquainted, being de-

* Vide Elements of the practice of physic, by Dr. George Fordyce, page 351.

tained for some time on the island of Madagascar, perceiving that many of the natives were afflicted with gonorrhœa, attempted to cure them by an injection, and he succeeded in curing many; but unfortunately meeting with some of the usual accidents from injection, hernia humoralis, &c. he did not then prosecute the experiment; but when he afterwards practised as a surgeon in England, he occasionally employed the same injection and frequently with success. It was used in this manner:

R *Argent. Nitrat. gr. iij.*

Coral. R. ppt. ʒij.

Aq. Mollis. lib. ss.—m. f.

If any one should be induced to try this kind of injection I would recommend him, previous to his mixing the *Coral. R. pp.* with the water and *Argent. Nitrat.* to pass the two latter through a filtering paper, and also to lower the strength of the solution.*

* I have not myself had any experience of this preparation of silver, when made the basis of an injection; the coral I conceive may be omitted, and the solution made much weaker than the above in boiling water.

Calomelas.

Of this medicine, whether after due levigation it be simply mixed with water, or united with water and mucilage, the effects are nearly the same. It neither stimulates nor increases the discharge. How far it may act as an anti-venereal, or as a promoter of good secretion, is difficult to say; but its most obvious effect is that of a sedative; procuring ease, correcting and greatly lessening the discharge. It is a powerful repeller and healer of Chancres and chancrous excoriation, and will, when applied to the urethra in certain cases of Gonorrhœa, have a similar effect.

When used in less quantity, or of less strength, it will act mildly, allaying irritation, moderating the symptoms, without having much effect in checking the discharge. Some errors are daily committed with respect to this medicine in the form of an injection. It is not always well prepared, it is seldom levigated sufficiently fine, and is frequently employed in too great a proportion to the quantity of the vehicle.

There is a circumstance with respect to Calomel worthy of note. When it has been simply mixed with water, and the Calomel suffered to subside for a time, the clear liquor alone will make a very useful injection.

The next mercurial injection is that composed of

Hydrarg. Crud.

which may be united with water and *Mucilage*, by trituration, or with *Axungia* or oil, by the same means. It is neither stimulant, astringent, nor sedative; but has a very excellent effect in correcting the virulency of the discharge, without deranging much, or altering considerably the natural means of cure.

The syringe employed to throw up the above injections should never have a long tube. Its extremity should be conical or obtuse. It should be used without exerting much force, or attempting to carry the fluid far into the urethra. That time for the operation should, if possible, be chosen when the penis is in its most flaccid state; and the penis, at the time of in-

jecting, should be drawn gently forwards, as it were over the extremity of the syringe.*

The above are the principal means that have been employed to cure in the way of injection. The slightest retrospect to the accidents attending this disease (which I need not repeat) will shew that whether we make choice of simple or mercurial stimulants; whether astringent sedatives, or mercurials acting as sedatives; or the mildest of all mercurials, the crude mineral—Still there is a degree of uncertainty, if not empiricism, in the practice when trusted to alone, without that assistance which it is capable of deriving from our general treatment.

Having shewn that there is in this treatment neither danger of metastasis, hazard of smothering chancrous infection, nor any irritation applied, but what arises from the disease itself, it will readily be granted, that when in-

* The proper syringe should be of the smaller size, and made of ivory—they have been in use to my knowledge for forty years, and may be had almost of every turner, from Crooked Lane to Hyde Park corner.

jections of a stimulating kind are employed, their effects will be less likely to produce inflammation under a cooling antiphlogistic regimen, and the various means, formerly described, which tend to anodyne relaxation, than when they are had recourse to without this precaution ; and when astringent sedatives, or mercurials having a sedative effect, are used, that the same remedies, more particularly the warm bath, will probably enable the surgeon, with proper attention to the strength of his injection, to counteract its too great astringency, or tendency to check the discharge, and that thereby some of the accidents occurring in this disease may perhaps be obviated. And the same practice I conceive necessary when an injection is employed early with a view to anticipate the inflammatory symptoms, but still more after their commencement to moderate the tendency to phlegmonous inflammation. And I sincerely wish it was in my power to prevent the probable consequences to be apprehended from the combination of Chancre with Gonorrhœa ; but this, I fear, will ever remain an obstacle to the indiscriminate and unqualified

application of injections. When, however, the disease has passed its height, the Chordee gone, or considerably lessened, and the other symptoms declining, injections, both of the mercurial and astringent sedative kind, may be safely employed, either singly or in conjunction with certain parts of our general plan; and in the choice, from what has been said on the subject of these local means of relief, there can be no difficulty.

When Gonorrhœa Virulenta appears with Chancre, or chancrous excoriation, in that case the treatment must be very different from the above mentioned. In the first place we may here say decidedly, that all injections and topics are wholly inadmissible. In the next, to the general treatment proper for the Gonorrhœa must be added a fair and unequivocal course of mercury to cure the ulceration, and prevent all consequences from this symptom in future. The reader will therefore recur to our first general method for the treatment of what appertains to the Gonorrhœa; and to our observations on the cure of Syphilis in the preceding part of the work, for the method of treating

Chancre, or chancreous excoriation. It may sometimes be necessary to join the antiphlogistic treatment with mercurial frictions, if inflammatory diathesis prevails. In lax or phlegmatic habits, where there is little or no disposition to inflammation, *Bark*, warm bath, and mercury, are the principal remedies for the Gonorrhœa; and the effects of the latter are so striking and certain in this particular habit, that it may be trusted to almost alone for curing the Gonorrhœa as well as Chancre.

Gonorrhœa in Women.

When I consider the uncertainty there is in ascertaining whether a woman having a gonorrhœal discharge, may not also, from the natural form of her pudenda, have, at the same time, one or more concealed Chancres out of sight, far within the vagina, I am in doubt as to the most eligible mode of practice; whether to treat such woman as infected with Syphilis, —presuming that she has, or will have Chancres,—or whether it is better to consider her as other gonorrhœal patients, waiting for the appearance of Bubo, or other venereal symptoms, before she uses mercury in a fair decisive man-

ner? There are difficulties either way. There seems a degree of cruelty in the idea of advising a woman to submit to that kind of discipline we do not generally recommend to a man with a Gonorrhœa Virulenta; but the probability of her having the chancrous fomes about her, though she may have apparently nothing more than a Gonorrhœa, is so great, and must be so mischievous to herself and others, if the supposition be well founded, that it is a question whether it is not much safer to remove the difficulty by depending almost wholly on the unequivocal effects of mercury under confinement, than to omit it? And the difficulty is the greater from this further consideration, that in the event of Chancres existing, nothing but the fair effects of mercury can render injections even tolerably safe. If the use of mercury to the system be vindicable in the Gonorrhœa Virulenta of men, it appears to be much more necessary in women.

Thus, I have endeavoured to explain three very different methods of curing the Gonorrhœa, each of which might have been branched out,

or subdivided, into many others: and I have taken some pains to shew each method in its true character, and point out the necessity of combining occasionally their several principles or parts; and must here repeat that their effects are applicable to different circumstances, both of time and disease, and to the various constitutions we meet with in practice. These sheets were never written to entrap the ignorant and unwary, but with the well-meant intention of adding somewhat to the pathology and therapeutic parts of medicine. To the regular professors of science, therefore, I must appeal, and to them only, to refute or confirm what, with respect to the cure of this disease, has been candidly submitted to their decision.

Fiat experimentum was the language of the great Lord Bacon in philosophy.—And as far as philosophy and experiment can safely go together in the living subject in any part of medicine, with the existing knowledge of the day, it may, without danger, be the rule still. But let us, in an affair of so much real importance as the health of mankind, previously inquire and ascertain the general information

to be derived from the past and present state of medical knowledge—the *lex scripta auctorum*. Without that, our researches, however well intended, will frequently be uninteresting, our labour fruitless, and practice empiricism.

So much has lately as well as formerly been said by writers on the remote consequences of the disease,—namely, Stricture, Fistula in perinæo, diseased neck of the bladder, and enlarged Prostate gland, that I have but little to add.

In proportion as the disease advances from mere inflammation to more permanent habitual irritation, so the difficulty of cure increases:—adhesions, excoriation, and even ulceration from the partial sloughing of the mucous membrane may take place.

I know very well, that upon dissecting urethræ of persons who have died from other causes than Gonorrhœa, but with this disease upon them, Morgagni, and others, have very seldom found ulceration. And if they had examined the mucous membrane of the trachea, or bronchia, in persons with a mere catarrh, but dying from some other cause, they would

have had no better success.—But it is well known after many catarrhs, and that sometimes at no very late period, their consequences are ulcerations of the most deplorable kind, and these followed by pulmonary consumption; and without going further into the question, we find the vestiges of previous ulceration in many cases of considerable Stricture. What can produce that obliteration of the fine delicate structure of the urethra, and loss of substance which such cases exhibit, but the gluing together of the cells of the membrane by irritation and inflammation in the first instance, and a consequent ulceration in the second?

I have no doubt of the great utility of drains, of early and late blistering in the catarrhus affection above mentioned, and make no hesitation in saying, that very good effects will probably follow the adoption of the same practice at any time during the progress of Gonorrhœa, both before and after the formation of a Stricture.

Obstructions in the urethra may arise from different causes, but the most common cause

is Stricture, which is a preternatural contraction of one or more parts of the urinary canal, most frequently the late consequence of a former Gonorrhœa. From this disease, also, adhesions of the inner parts of the membrane, as between the surface of the lungs and pleura, may take place. I am not certain whether these adhesions are the effect of coagulable lymph thrown out by inflammation, or whether they are produced by ulcerated surfaces coming into contact.—Besides the above causes of obstruction, there may be a diseased verumontanum, fungous, verrucous excrescences within the urethra, and diseased prostate gland.

Verrucæ I have sometimes seen within the orifice of the urethra in women, as well as men, and chancrous infection will sometimes, though rarely, extend much farther into the passage than has been generally imagined. If the absorbents have that universal distribution, which may naturally be inferred from what we know of the sanguiferous and nervous systems, I know no reason why true venereal poison, from a Chancre, may not be conveyed by a lymphatic communication to the neck of the bladder, or to

other parts, and so into the system, as well as by the more general route, through the lymphatics of the groin; and I believe it has sometimes been the unknown cause of late venereal symptoms, when they have arisen from what has been erroneously supposed only a simple *Gonorrhœa Virulenta*.

I have thus far trespassed on the reader's patience to account for *Verrucæ* and fungous excrescences, which have sometimes been found within the urethra. It is probable that a fungus may arise, though rarely, without venereal infection, but I believe a true verrucous excrescence never can.

Stricture.

In a very ingenious paper by the late Dr. Monkley, in the *Medical Transactions* of the College of Physicians, vol. i. p. 174, we have an account of the stricture of the œsophagus, the cure of which this gentleman attempted, and effected by mercury. Mr. John Hunter has informed us that Strictures are defects found not only in the œsophagus, rectum, and other parts, but also in the urethra, from

causes by no means gonorrhœal. And this is certainly true; but the most general cause of Strictures in the urethra, I am certain, is Gonorrhœa.—This gentleman has justly observed, that persons having Stricture seldom apply to a surgeon till they find considerable difficulty in discharging their urine, and the disease is often considered as arising from gravel, &c. This is more particularly true with respect to elderly persons; and I am convinced that some of them go on with Stricture for many years, not knowing their complaint, till it becomes violent; the contraction, before it is thus alarming, having for a length of time existed, but been disregarded. So far, however, from this affection being produced, generally, by causes not gonorrhœal, and, if I may so say, as the consequences of age or habit, is it not universally known that we meet with them in all ages from youth upwards, but much more frequently in young and middle aged men than in old?—And such are almost always to be traced to a previous Gonorrhœa. Why they appear so late as they sometimes do, is another matter.—All I can say in answer to

that is, that the Gleet, excoriation, or ulceration, which I apprehend precede the Stricture, are of long continuance, and the process of contraction afterwards, slow and gradual. And as, to its not being one of the effects of injections, if (as has been shewn) these can produce metastasis or translation of disease from the anterior to the posterior and more distant parts of the urethra, and such translation is sometimes attended with very alarming local inflammation, terminating in suppuration, and an opening in a particular part of the urethra, there can be no difficulty in conceiving that a translation, of much less danger without abscess, may cause excoriation or ulceration on one precise spot of the membrane more than another. And as this new affection, produced by injection, is partial, so likewise is its consequence the Stricture. Ulceration may also arise from any part of the urethra becoming the principal point of the disease, where there has been no metastasis, more particularly anteriorly, or where the urethra makes its turn; for these places may become the sink or receptacle of the stimulating secretion from more remote

parts, as happens in dysentery, when the rectum ulcerates.

The general symptoms of stricture are pain, a difficulty and frequent inclination to make water, the stream of urine small, or made by drops, mucous sediment in the chamber-pot, and a disposition to retention and incontinence of urine.

A gentleman, aged thirty-five, who had a stricture for years, which he had neglected, was seized at three distinct periods with a retention or suppression of urine, from which he had been relieved, but would have nothing done to the stricture. He had been once attended by the late Mr. Pott, and once by a physician. On the third suppression, Mr. Pott being indisposed, I was desired to attend for him. I found the patient in great torture.—His bladder was very tense, and had been much distended for some hours; his pulse full, hard, and strong; his countenance flushed, his skin hot, and straining violently, without being able to make a drop of water. Under these distressing circumstances, he had done nothing; he had neither been bled,

opened, used *Opium*, or been put into the warm bath.—I very carefully endeavoured to pass both bougie and flexible catheter, but it was impossible. The stricture was in that part of the urethra where it makes the bend, and the contraction upon the bougie and catheter so strong, that I was convinced the water could never be drawn off, but by using stronger efforts than under the foregoing circumstances I was willing to make, without previously trying the effect of more gentle means. He was bled,—his bowels were emptied,—he was put into a warm bath,—*Opium* was administered in the form of clyster, with warm water and oil.—These means, by taking off the violent contraction and spasm of the bladder and other parts, lessened his pain, and diminished the strength and velocity of the pulse. The inflammation being thus reduced, he became easier; and without attempting any thing in the way of operation, with bougie or catheter, his urine dribbled from him, the bladder emptied itself, and he perfectly recovered,—his urine passing as it had done before the retention.

Although this gentleman knew he had a stricture, and that his life had been put to the hazard, yet he would not submit to use the only means that could possibly serve him effectually in future,—I mean the bougie. —Two years after this his stricture became again troublesome, but without retention; he had pain, a febrile pulse, frequent inclination to empty his bladder, mucous sediment in his urine, some degree of gleet, with tenderness and induration in perinæo. In this situation, he submitted to try what surgery could do. A very eminent surgeon was called in as consultant with me. Upon my representation of the case, he attempted, as I had before done, to pass a bougie, but in vain. The passage of the urine at the stricture was so small, and so difficult to hit, that we were foiled, and the contraction or spasm of the urethra so great, that it was sensibly felt on this side the stricture. By a cooling anodyne treatment, the warm bath, —poultices to the perinæum,—fomentations of warm vinegar,—mercury externally, and bark, the irritability of his habit, and of the part,

was gradually lessened. By great care and perseverancé, at length, after entering the opening in the stricture, I made daily some progress; but the irritability of the parts was so great, that I was at times obliged to have recourse to the warm bath, and desist for a day or two. His symptoms, however, upon the whole, were greatly alleviated; the induration and tenderness in perinæo less, the inclination to make water not so frequent, less mucus, with an increased discharge from the stimulus of the bougie. After some weeks I got beyond the principal stricture.—Every line afterwards, excepting about two inches of the passage, which seemed to be sound, till we reached the prostate, I could clearly feel a further contraction, by the bougie passing with some difficulty, and rubbing, as it went through a part of the bulbous and membranous portions of the urethra. However, it passed at length into the bladder, upon which all his symptoms went, and there remained a free and open passage; the stricture was dilated, but probably not obliterated, with the disposition to contraction to a certain degree.

remaining; and that it did remain, was afterwards evident, for within the space of two years, he felt at times greater difficulty in passing the bougie than usual;—he had also a teasing kind of uneasiness, heat, and sometimes increased irritability in perinæo, which obliged him to discontinue the remedy for a short time now and then. This uneasiness terminated in a deep-seated sluggish suppuration. I discharged a small quantity of urine and matter by puncture. The integuments being so lax, that they were moveable over the fluctuation, I availed myself of this circumstance, and drawing them upwards over the cavity containing the fluid, I there made the puncture in such a manner, that the opening in the integuments, and that of the cavity of the abscess, did not, upon taking away my finger, correspond,—the skin and integuments acting in some measure as a valve. I know not whether any great advantage was gained by making the opening in this way, but it healed immediately, I had no further trouble, and no fistula followed.

There are so many relapses from a complaint of this kind, that every man labouring under it should acquire the habit of introducing a bougie, an elastic or flexible catheter, that he may relieve himself in case of a sudden retention when at a distance from surgical assistance.—This precaution is the more necessary, from this further consideration, that every considerable stricture leaves a diseased organization which the bougie cannot destroy, and which, however well treated in the first instance, has afterwards a greater or less disposition to contract.

Having mentioned that kind of violent contraction or spasm which generally takes place, not only in the bladder and neighbouring parts, but in the urethra, during a suppression, I must call the reader's attention more particularly to a lesser degree of these affections, which frequently occurs in stricture. This disposition to contraction originates from the stricture itself, and thence extends gradually to the bladder and contiguous parts, and anteriorly, in a less degree to the urethra. To overcome or moderate this propensity in the

first instance, there is a necessity for the means of producing anodyne relaxation which need not be repeated. The second remedy for counteracting this obstacle is to dilate the passage with a bougie; the simple introduction of which will give the parts on this side the stricture, the stricture itself, and the neck of the bladder beyond it, a disposition to open. And it is a singular fact, that it will frequently do this, although it be impossible to pass the stricture; and when the irritability of the urethra at that part is so great that it cannot bear the contact of the extremity of the bougie. Wearing a few inches of this application in the anterior part of the passage only for a few hours every day will sometimes mitigate the symptoms, and diminish both the difficulty and pain of discharging the water, more particularly when the urethra is very tender, or much contracted. Some injury, as well as much good, may be done by a bougie, and we should make our first attempts with proper caution; and I am convinced it is sometimes much safer at first to introduce a bougie not to the stricture, but

only within some distance of it, going on by degrees, increasing its size, and proceeding slowly towards it. Partly by the discharge produced, and partly by the tendency this will have in lessening the general contraction, giving the diseased part a slight disposition to open, and establishing in the patient a habit of feeling the bougie, a preparation will be made for its more immediate action on the stricture itself. And I have no doubt but that by this method of proceeding, a small opening in the stricture may be more certainly hit in all cases, but particularly when the parts are painful and tender.

There is great difference in the feel of strictures, as well as in the size of the opening through which the contracted stream has passed. Some admit the bougie with difficulty, others will not admit one at all; and in some instances it will strike against the stricture as against a hard callous body. The points of the bougie are sometimes made finely tapered, sometimes obtuse, and rounded off like the smooth extremity of a common catheter. I prefer the latter form for

general use as being much less likely to hitch in a lacuna, or take a false course, than when finely pointed: but the first, provided the bougie be only conical at the extremity, may be better for entering a very small stricture.

There is a nicety in entering, and an address requisite in keeping the point within the opening of the stricture, which can only be acquired by practice; and there is the same in keeping it as close as possible to the obstruction when the opening cannot be hit. On these circumstances much will depend. It requires patience, coolness, and perseverance. If the surgeon can make any progress, though slowly, he must be contented. If after the exertions of many days he once gets through, he will be compensated by seeing the ease and comfort of the patient, and the pleasing prospect of being soon at the end of his labour.

A gentleman from Ireland in the year 1777, aged about fifty, had been long subject to a mucous discharge, attended with intolerable pain, and frequent ineffectual attempts to make

water. The quantity of mucus was very great; it stuck close to the bottom of the chamber-pot, was of a thick greasy consistence, and deeply purulent. He had not slept an hour together after going to bed for seven years, owing to the pain and frequent calls to pass his urine. He was much worn down, and in very ill health; some medical gentlemen who had seen him in Dublin, from the quantity and appearance of the mucus he evacuated, concluded the bladder must be ulcerated. Mr. Pott, whose patient he was, entertained a very different idea. We both made an attempt to pass a bougie, but without effect. Upon a consultation with Sir Cæsar Hawkins and the late Mr. Adair, Mr. Pott's opinion was confirmed. After some preparation, by putting him into a warm bath, ordering an enema with *Opium*, water, and oil, &c. for a few nights, he began again with a bougie. Although the disposition to contraction in the urethra in this case was strong, yet the irritability of the parts was not great, and he bore the introduction so well, that I was

soon enabled to pass the bougie night and morning. The seat of the disease was in the bulbous and membranous parts of the urethra. In three weeks a very considerable progress towards the bladder was made, and in proportion to this progress, so his symptoms lessened. He had less mucus in his urine, —the pain, irritation, and frequent desire to empty the bladder were greatly diminished, —he slept better, and was evidently mended as to his general health. Three weeks after the first, a second consultation was held. I passed the bougie, and the gentlemen were all of opinion, as well as myself, that it had entered the bladder. There was however a circumstance still continuing, which was remarkable, namely, the disposition in the urethra to contract on the bougie. Upon this Sir Cæsar Hawkins observed, that the medicine the patient had been for some time taking, namely the *Bark*, would frequently have the effect of increasing this disposition; and he said further, there was every reason to suppose, from the rapidity of the cure,

that notwithstanding the length of time the complaint had remained, the parts were not much diseased.

It was in the month of August, when Mr. Pott generally went out of town, that this gentleman, among other patients, was left under my care. I was not a little surprised to find that the symptoms, although greatly lessened, did not go off upon the bougie (as we had all supposed) entering the bladder, but I soon found I had a further progress to make; and luckily, having neither an irritable patient nor a diseased prostate in the way, the obstacle was overcome, and the bougie at length finally got into the bladder;—upon this the symptoms soon ceased, the parts recovering their long lost action, and the patient his former health.

This last difficulty must have arisen from the stricture being in that part of the urethra embraced by the prostate gland; for upon measuring the length of different bougies, I could ascertain that we had been before nearly an inch short of the entrance into the bladder.

In the case last described there was no external induration, or tendency to a fistula in perinæo, nor difficulty attending the frequent introduction and operation of the bougie; but it sometimes happens that even those made of the best and mildest materials will produce sickness, fainting, and considerable pain. Under these circumstances the surgeon must proceed gradually, in habituating the feelings and sensibility of the patient to the stimulus of the bougie. If he buys them from the maker, he should know with certainty the composition. Some from their ignorance, others for their convenience, employ the heating gums, *Pix Bergund. Turpentine, Colophrony*, &c. medicines, much too stimulating for so tender and delicate a surface as that of the urethra. And although I have thrown out some hints as to the probable advantages of employing some of the *pusmoventia* with the bougie; what was said must be understood as matter of future inquiry, and if attempted as an improvement, the experiment must be made with great care. I have constantly myself used bougies of the

least stimulating quality, and have sometimes had recourse to such as had *crude mercury* in the composition; but have never employed the other chymical preparations.

When an incontinence of urine takes place from stricture, or obstruction in the urethra, the gradual dilation of the passage, till the bougie has fairly entered the bladder, is the cure; and the same remedy is applicable to fungous or other excrescences within the urethra; but in these cases, medicated bougies are strongly indicated.

The situation of the verumontanum and orifice of the vasa deferentia is such, that when disease has taken place in these parts, it is most frequently attended with considerable degree of irritability, perhaps from their near connection with the prostate gland; and this may happen without any corresponding enlargement of this body. A previous cooling anodyne treatment, going on with the bougie gradually (as has been already explained) being careful not to irritate too much, and employing during its use leeches to the hæmorrhoidal vessels, if the patient can bear the loss of blood: opiates—the warm

bath—and if occasion should require blistering, or a drain somewhere near the part diseased—the tepid sea bath, and mercury externally (if the general state of the patient does not contraindicate) are the usual means of relief. And when the bougie irritates so much that it cannot be born at or very near the seat of the mischief, it may be introduced so as to remain in the urethra at some distance. But when it lies easy, and the surgeon can proceed, he may consider the complaint as Stricture, and go on till he has fairly entered the bladder, and dilated the passage. For I know no just reason why a contraction of the canal may not take place near the verumontanum, as well as in any other part; and the distinction between a diseased verumontanum without, or with Stricture, can easily be made.

Enlarged Prostate Gland.

When this body is diseased, some parts of the foregoing treatment may also become necessary, but there is more caution requisite as to the external use of mercury, lest it should stimulate the gland too much, and increase the

tendency to suppuration. If there is much general heat and fever, with great irritability, it is wholly inadmissible, till these circumstances have been quieted. And indeed, when this body has been long affected, it can be of no service as an antivenereal; and when its internal structure has been considerably altered, perhaps but little good can be expected from its deobstruent power, but this is by no means invariably true. The general heat and irritation must, if possible, be appeased in the first instance. Leeches to the hæmorrhoidal vessels; country or sea air, a milk or plain diet, in which there should be a large proportion of vegetables,—discutients externally, semicupium, or the warm sea bath, cicuta, spong. ust. opiates per anum, producing a discharge anteriorly from the urethra by a bougie, if it does not irritate too much; a seton, caustic, blistering the perinæum, or some other neighbouring part, repeatedly; if the state of the patient's bowels, and his strength will bear the exhibition of sea water internally, and under certain circumstances *Bark*, are the principal means I would recommend, for quieting irritation, diminishing

the size, and preventing suppuration within the gland. When these objects have been accomplished, mercury may be tried in combination with some of the means now mentioned; but its effects must be carefully watched. It must be noted that the enlargement of this body, which sometimes follows, as a consequence of Gonorrhœa, is not strictly speaking cancerous. It may take place in a scrophulous habit, but is most frequently the late effect of inflammation or suppuration; and it is for that reason I shall endeavour hereafter to shew that surgery may possibly afford another resource, in some cases, when all the foregoing means have failed. With that kind of diseased Prostate Gland, which sometimes occurs in old men, we have nothing to do; it does not properly belong to syphilis, and therefore may be passed over.

Induration and Fistula in Perinæo.

A fistula in perinæo may arise two ways, either after the partial and incomplete healing of a considerable abscess in the perinæum, or with an abscess seemingly trifling like a boil,

as a consequence of Stricture. In both there is a breach in the urethra, and the event after each is frequently the same; namely, a small fistulous opening, through which a few drops of urine escape, this heals imperfectly, and breaks out again; and so it goes on with more or less attendant induration; or the complaint may not have proceeded so far; there may be stricture with induration, but without the urine and matter having found a way outwardly through the integuments. As the last is the most simple of the three cases, it should be first considered.—The Bougie, discutients externally, more particularly warm vinegar, and *Ung. Hydrarg.* rubbed into the indurated part, will have a good effect; and by the united action of these means, the stricture will generally give way, the hardness go off, the oozing of urine through the urethra, which produced the hardness, will be checked, and an opening externally prevented. The passage having been thus rendered pervious, the diseased urethra is in some measure restored to a more natural state, but with a certain alteration of its structure. The two former cases may be treated

nearly in the same way as the preceding, placing the principal dependence for a cure on the Bougie, discutients, and mercury. By this gentle management, without the use of the knife, have many fistulæ been cured, although there has not only been much hardness in perinæo, but a percolation of urine into the cellular membrane, in various directions. If the bougie can be introduced fairly through the stricture, and into the bladder, the cure may safely be trusted to that principally; its size should be gradually increased, and if the urethra can bear this, it may be worth the trial to attempt correcting the secretion, by using other medicated bougies; by the term, I mean the *pus moventia* of the mercurial kind. Such topics, when applied to a common sore, will thicken and coagulate a thin gleetty discharge; and upon this, if the action of a common bougie fails, the greatest dependence may be made.

A gentleman subject to nephritic complaints, who at two different times had had considerable inflammation in one kidney, discharge of mucus and affection of the corresponding ureter, from

the passage of a stone into the bladder, was relieved by the usual means; but after the last attack, he found his urine still loaded with mucus, which continued so long, and was in such quantity, that it was apprehended he would go into a decline from the drain; he was daily losing his appetite, strength and flesh. Under these circumstances, from the suggestion of a friend, he took an ounce of bark a day for several days; this lessened the discharge considerably, and by recurring to the same remedy he recovered his former health. His urine, however, at times retained some degree of foetor and mucus. Years after this he contracted a gonorrhœa. He was himself a medical man, and considering it a slight matter, he used an injection of *Zinc. Vitriol.* This took off the running, but was soon followed by a tenderness in perinæo; the inflammation went on, and ended in an abscess, notwithstanding his efforts to prevent it. The matter was let out, and when his sore was considerably contracted, and he had employed a bougie for some time, he came to town, and went on gradually dilating the passage, and using mercury externally.

During this course, small indurations would, after feeling more tenderness and difficulty in passing the bougie than usual, from time to time arise; they would proceed to a crude kind of suppuration, and upon opening them by puncture, they immediately healed. At length by perseverance the passage became very free, neither hardness nor external opening remaining. In this state he returned to the country; followed his business as usual, and remained with the occasional assistance of the bougie; well, till a third attack upon the kidney and ureter, on the opposite side to that formerly affected, occasioned his death. Upon examination, it appeared that the substance of the kidney first affected had melted away, and in the ureter on the opposite side there was a stone which could not pass. But the urethra, and part where the stricture was, shewed only the vestiges of former disease; being much less affected than the bladder, ureters, or kidneys.

Another gentleman, surgeon to a man of war, when in the West Indies, for a gonorrhoea which he contracted there, made use of

a calomel injection. It stopped the discharge immediately, but occasioned tenderness, hardness, and at length abscess in perinæo ; all the means he could apply not being sufficient to prevent the formation of matter. He came to England with so considerable a breach in the urethra, probably from the membrane having sloughed, that every time he emptied his bladder, the urine would come through the wound in a small stream ; complicated with this affection, he had, though a young man, an enlarged Prostate Gland. He lingered on for some time, but at last died consumptive.

The above cases are not adduced as the only instances that might be brought forwards, nor do I wish by mentioning them to discourage altogether the practice of employing injections in proper hands ; for I know they may be highly useful ; but their application should be left to the judgment and discretion of well informed medical men, and to them only. These gentlemen were sensible intelligent practitioners, but they were both wrong ; the one treated his complaint too lightly, being deceived by its apparent slightness ; or perhaps thinking he

could anticipate the symptoms by an early use of the sedative. The other expected at a more advanced period to lessen the subsisting inflammation and virulency of the disease by the local application of a mercurial. And the immediate consequences were nearly the same in both cases.

When the urethra, towards the neck of the bladder, is thoroughly diseased, and there is no possibility of dilating or opening the contracted part internally by bougie, or caustic, applied to the stricture. When other circumstances are pressing, little urine coming through the urethra, and that little with considerable pain, as much nearly, perhaps, passing through one or more fistulous openings in perinæo, and neighbouring cellular membrane, and these openings also attended with considerable induration; it has been proposed to dilate the several sinuses, divide the stricture, and lay the whole of the diseased urethra open to the bladder; thereby putting the several injured parts under the necessity of suppurating largely, and, by a new and different arrangement of circumstances, endeavouring to obtain

a cure. The case* described by Mr. John Hunter is very interesting; but though the patient did well from the operation, and was greatly relieved, being able to pass his urine afterwards by the natural passage, the difficulty of entering the bladder, either with bougie or catheter still remained. Notwithstanding this, if it should ultimately turn out that this patient could for life, or a great length of time pass his urine freely by the penis, it will be a very useful fact, and clearly shew that the simple division of the diseased membrane, after opening the collateral sinuses without excision or the removal of indurated parts, may be as curative in a fistula in perinæo as the simple division of the gut is in the fistula in ano.

In another case mentioned by Le Dran,† a cure was obtained, but in a different way; for he used the mode of excision, which perhaps was not necessary; and after the cure was more fortunate in being able to pass a bougie, and recommend the occasional use of it to his patient afterwards.

* See his Treatise on the Venereal Disease, p. 160.

† See Consultations de Chirurgie, p. 214.

It may be asked what is gained by the performance of operations so painful, and of such difficult execution? The dispersion of the several indurations in the perinæum, the healing of the fistulous orifices, the cessation of that oosing of urine into the cellular membrane and other parts productive of those indurations, originating in a breach of the urethra, which breach, when comprehended in the incision, closes; in consequence of this the pain and other distressing symptoms cease; and the case, after cure, becomes a contraction of a new kind, in consequence of healing a considerable wound recently made in parts formerly altered by disease, and may fairly be compared to that kind of contraction which follows the operation of lithotomy.

Petit in a case described in the memoirs of the Royal Academy of Surgery,* succeeded in the cure of a fistula in perinæo, where the opening in the urethra was within the prostate gland, which was probably enlarged. In his reflections on this cure, he observes

* *Memoires de l'Academie Royale de Chirurgie*, tom. 1., pag. 619.

that the operation would not have answered, if the patient had not first undergone a mercurial course to destroy the venereal virus, which he says existed in his patient's habit; nor would it have taken place afterwards, if he had trusted to an external division of parts, and not carried the incision of the urethra (as he expresses it) "au-dela du col de la Vessie," and he adds, "En effet l'expérience nous apprend que par l'opération on ne guérie point les fistules et sur-tout celles du perinée, si l'on se contente d'ouvrir l'extérieur; et qu'il faut, que l'orifice interne de la fistule soit compris dans l'incision." His incision went into the prostate, if not through it; but he did not venture on this part of the process till he had previously lessened by mercury not only the induration felt by the rectum, in which induration that of the prostate was included; but also those of the perinæum. I have an idea that the same line of practice with respect to mercury may be extended to some other fistulæ in perinæo, even when complicated with an enlarged prostate gland; and that the simple division of

the latter afterwards may tend to the saving of some lives, which by a less decisive treatment have been lost. In many common strictures (as has been shewn) the symptoms do not cease till the bougie has made its way fairly into the bladder; and I agree with Petit, that when the breach or opening is in the neck of the bladder, if the incision does not comprehend this opening, the operation will be useless. Time will throw more light on these subjects, and may shew us even in the case of an enlarged prostate gland from a gonorrhœa, that when a free passage into the bladder (on which I apprehend much depends) cannot be accomplished by other more gentle means, and the patient is daily getting into a very perilous state; relief may at last be procured by an incision through its neck. And thus at the same time it is possible that the great object of diminishing the size of the gland by the large suppuration which must necessarily follow, will be obtained; if matter has formed within its body, that matter will be evacuated, and the bladder itself relieved from the subsisting irritation.

Puncture of the Bladder.

If all other means of relief have been fruitless, and the bladder is greatly distended by inflammation, in what has been called by the French a complete rétention, and by us a suppression of urine, the bougie and catheter having been of no avail, and mortification likely to follow speedily; it has been recommended to empty the viscus by making a small opening into it. And the operation has been done in three different places; namely, above the pubis, in that part of the bladder not covered by the peritonæum; through the rectum and bladder beyond the prostate gland: and in the perinæum. The first two are not difficult to perform, if the bladder be sufficiently distended to be felt above the pubis, or by the finger from the rectum;—and as they have been well explained by other writers, I need not enter into them, only mentioning that with respect to the first an external incision of the integuments, till the surgeon can feel the distended bladder, will greatly

facilitate the making the puncture in a proper manner.

The third operation is more difficult, whether performed by Mr. Hunter's method*, or by that mentioned by Desault†. The precise part of the perinæum where the latter directs the puncture to be made is thus described—"Tandis qu'un aid comprime légèrement la région hypogastrique, le chirurgien ayant un doigt dans le rectum pour l'éloigner du lieu où se fait la ponction, port le troiscart dans le milieu-d'une ligne, qui partant de la tuberosité de l'ischion, se termineroit au raphè, deux lignes devant la marge de l'anus, &c."

I have seen very few cases in which it has been necessary to have recourse to any of these truly disagreeable alternatives to enable me to determine their respective merits. Desault's method might perhaps be improved, by making first an external incision, till the bladder can

* See Mr. Hunter's *Observations on the Venereal Disease*, page 190.

† See the *Journal de Chirurgie*, tom. iii, p. 166.

be distinctly felt, and then performing the puncture.

But when disease has long subsisted in the neck of the bladder, and been the occasion of retention, and such diseased affection remains, it may be asked, what prospect is there of these operations being any thing more than mere palliatives? If for instance, the puncture above the pubis has been made, and the distension removed, the bladder may very possibly fill again. The fact is, they can only relieve an accidental retention, arising from inflammation in persons whose urethra are diseased. And if the obstruction is of that alarming nature that no instrument can pass, from the great disease of the parts; and little or no passage remains for the urine, though the surgeon may puncture, and empty the bladder *pro hâc vice*, he may be under the necessity of repeating the operation, or the patient will still be in danger of his life. Therefore of all the means that can be recommended for emptying the bladder in such cases, that it may be said would probably be the best which aims at two objects, namely, the lessening the original complaint (the disease

in its neck) and at the same time removing the retention, which is its consequence. In some instances, perhaps, the practicability of getting into the urethra beyond the stricture (as mentioned by Mr. Hunter, in his *Observations on the Operation for the Fistula in Perinæo*) may be worth consideration, even in the case of retention. But the actual division of the neck of the bladder cannot, I think, be as vindicable in other cases of obstruction in this particular part; for such operation would be not only very difficult to perform, but extremely hazardous, and is what even the daring confidence of French surgery has not yet, I believe, ventured to propose. The parts being greatly altered, thickened, and rendered callous by disease; the difficulty of getting into the bladder this way must be infinitely greater than any attempt to cut for the stone, as Friar Jaques was said to have done, without the direction of a staff. And under the above circumstances the surgeon can have no guide but the rapha, and his own anatomical knowledge, for making such an incision as shall enable him to get through the stricture, and

afterwards search for the small contracted passage towards the neck of the bladder, in order to the introduction of a female elastic catheter, or grooved director; if he can introduce either, he is so far fortunate, and may then, if he pleases, easily divide the neck of the bladder with a cutting gorget as in the lateral operation of the stone. But if he has no such direction what can he do? He may, perhaps, be able to dilate the membranous portion of the urethra, and even part of the prostate, without wounding the rectum; but when he has gone so far safely in this direction, there are only two ways in which he can possibly proceed farther. He may, perhaps, by turning the back of the knife towards the rectum be able to carry on the incision towards the bladder laterally, as Mr. Cheselden constantly practised in cutting for the stone, before the invention of the gorget now in use. Or, by a nice piece of dissection, first separating the prostate gland to a certain distance from its attachments to the rectum, and making afterwards the division from below upwards, keeping the gut away, and turning the back of

the knife towards it, he may thus, perhaps, be able to set the stricture of the neck of the bladder free. These are only some of the difficulties of attempting to remedy the two objects at once. But there is this further obstacle. In the case alluded to the neck of the bladder is in such a state from inflammation, that it can hardly be supposed to bear so much additional irritation.—In short, in whatever light this truly deplorable case of suppression be viewed, there are difficulties almost insuperable; and probably therefore the puncture above the pubis, or that through the rectum, may generally be the safer methods. The one will be effected in a distant part of the bladder, the other beyond its neck and prostate gland. If the patient survives, it may be an object of future consideration whether, when he does not labour under a complete retention of urine, he will submit to a very painful and uncertain operation, and thereby endeavour to obtain more permanent relief for his disease. Such no doubt would be made into parts highly diseased; but without laceration, and without those difficulties which must in a greater or less

degree attend the extraction of a stone ; and if ever attempted must be a mere experiment, on which time alone can decide, both as to its practicability and utility. Being contented myself with pointing out what I conceive to be real difficulties, I leave this as I have before left some other important questions, respecting certain points of practice, in the late consequences of gonorrhœa, to the future observation and investigation of others.*

Having come to the last and most truly disagreeable termination of some gonorrhœæ, and shewn how the disease may, step by step, go on till it endangers life itself, I must earnestly desire the reader would revert to all that has been previously said as to the indispensable necessity of preventing and removing speedily inflammation, and all its more early consequen-

* Since the former edition much very useful information has been given by Mr. Home, and lately by Mr. Whately, on the subject of Strictures. The one endeavouring to make an artificial passage through strictured parts of the urethra, so as to open a way into the bladder by the lunar caustic, the other by the application of the *kali purum*. These are great improvements on the former mode of practice, and require a separate discussion.

ces; also to the observations made on the action of mercury in this disease; when the state of inflammation and habit were not inimical to such action;—and the uses to which certain injections of the least stimulating, or sedative kind, under particular favourable circumstances of disease, might be applied. And view the three methods, namely, that calculated for inflammatory diathesis, that frequently employed in contrary circumstances, and that generally attempted by injections, separately as parts; and when united, as forming a system of practice capable of being directed according to the judgment of the practitioner to this or that particular case of disease. When he has so done he will, I hope, clearly perceive that nothing but inattention to the principles of each of the three methods can ever bring a gonorrhœal patient under the truly distressing situations of having either metastasis, affection of the prostate gland, abscess, fistula in perinæo, or suppression of urine; and if the disease be counteracted in time by the several means of cure which have been fully pointed out, such

consequences would rarely, if ever, follow. To these therefore, as my last request, I do sincerely recommend him to direct his attention. If it should be urged against me, that in what has been said I mean to discourage the practice of using injections, I beg leave to say, I have never entertained such an idea. I could not, with my eyes open, avoid seeing in the course of my life some of the mistakes which have been made in their application. I wish to moderate a too great and indiscriminate confidence in these means of cure, particularly when trusted to alone, and have, by making the student previously acquainted with the remedies by which the disease may be cured without any injection in two very opposite states, enabled him to judge with accuracy what he may with safety chuse as assistants to their several properties; and what he must, to be successful, avoid. It is certain that *Gonorrhœa Virulenta* may be cured without them. But it is no less true that they may very properly come in as useful auxiliaries to a general treatment, or when a greater reliance is placed in them, their specific effects may no doubt be

made less dangerous, and the sphere of curative action increased by combining them with some parts of such treatment.

Some practitioners consider every purulent running, with the smallest appearance of inflammation or heat at the orifice as venereal, and immediately use injections either of the sedative or mercurial kind, without waiting to see what kind of progress the disease will take, whether it will increase, or be attended with ardor urinæ, chordee, or not ; such a gonorrhœa, so imperfectly defined, may or may not be venereal.

The urethra is a mucous membrane, as much so as the membrana pituitaria narium, or the mucous membrane of the trachea ; from both these surfaces we have catarrhus affections and purulent secretions. No medical man can have a common cold without noting the previous irritation, the thin defluxion of the secreted fluid, the thickening of that fluid by a kind of natural suppuration (if I may so call it) and its attaining, in the progress of the disease, a deep purulency. We find in the mucous membrane of the urethra a similar train of symptoms, a train naturally common to all

mucous surfaces in every part of the body. I write it, with submission to more intelligent men, but I cannot believe that the mucous membrane of the urethra alone has not a natural propensity to similar affections, from various causes of irritation, independent of all syphilitic infection. When a purulent secretion follows a suspected connection without much heat, without chordee, without the disposition to metastasis and without that progressive suite of symptoms which mark a genuine Virulent Gonorrhœa, it may indeed be presumed to be venereal, but where is the proof? This kind of discharge has been said not to be curable by mercury like the other species, but may be taken off by injections in a day or two. If that be true, in all probability such discharge was not venereal, but the gonorrhœa simplex. Such a gonorrhœa I have known run itself off, and disappear without any assistance from medicine in the course of a week, by the mere efforts of nature, and such cases not being venereal, we do not wonder that mercury to the system makes no impression. Nor is it ex-

traordinary if the usual consequences of a Virulent Gonorrhœa suppressed, do not follow.

To suppose that every purulent or pus-like secretion is venereal, and as such infectious, would be to blend two things which may be essentially different. All that can be said when such a circumstance appears suddenly after connection is, that it looks suspicious. Time and due attention to the progress of the symptoms must settle the diagnosis of the disease. A man who implicitly believes that every running of this kind is venereal may cure such claps as it were by magic, for the patient may have a running one day and get rid of it on the next, and such complaints are common. A true gonorrhœa is never cured so expeditiously by any injection, or any treatment whatever. Let the disease be well and accurately ascertained in the first instance, before any decisive attempt be made to cure it. If the appearances are doubtful, let the discharge be left to itself to pursue its regular determined course, under simple ablution, or the cautious injection of tepid water, and the progress of the symptoms

will soon shew whether the complaint be virulent or not.

There are sometimes chancres within the urethra, but these are rare occurrences, and not generally attached to gonorrhoea. But when they take place, like all other chancres they pursue their own natural course. Do we not sometimes find a chancre at the orifice of the urethra making its ravages on that membrane without any attendant gonorrhoea? Does not this discriminate the two symptoms of gonorrhoea and chancre sufficiently? Besides, if in every gonorrhoea there were internal chancres, every gonorrhoea would be followed generally by bubo, tending to suppuration, and also by secondary symptoms of lues, which is by no means the case. They may, however, take place from an internal chancre, but this, as was said before, is no common occurrence, and does not apply directly to the disease in question. Having said that a purulent appearance in the discharge, soon after a suspected connection, is not always an infallible mark of gonorrhoeal infection; I may add that a purulency remaining after the disease has gone through its stages regularly, without the aid of

injections, as in our first and second methods of cure, is not always infectious. But the like discharge, when it recurs after the early use of mercurial or other injections which operate to its suppression, may probably be infectious in the true gonorrhœa, even at a late period. For in the discharge resides the virus, and if checked, it is in a greater or less degree retained. If the virus, according to the idea of some, be chancreous, where can be the advantage of penning it up by injections? The putting a stop to such running in the early stage of a gonorrhœa would be analogous to healing an external chancre by a topic. And we all know that such practice is followed almost infallibly by secondary symptoms of lues. But the fact is, such consequences do not follow the suppression of gonorrhœa, therefore it must have less virulency than chancre, and is indeed a very different modification of the disease. And this I take to be the true reason why the prevalent practice of employing injections is not attended with the above disagreeable consequences. For they have been used frequently in the early as well as subsequent stages of gonorrhœa, without

much discrimination. A practice in my opinion both injudicious and dangerous. I do not object to it, however, on the ground that such treatment will be followed by the true secondary symptoms of Lues, (though if that were the case, it would be an additional argument against injections,) but as leading frequently to hernia humoralis, inflammation in perinæo and neck of the bladder, &c. Consequences closely connected with gonorrhœa, but which have no relation *whatever to a genuine chancre. For these accidents never follow the premature healing of a chancre.*

But be the nature of the gonorrhœal infection what it may, to stop the discharge prematurely is an evil of no small magnitude. When we reflect that the glans and spongy part of the urethra and lacunæ are not only inflamed but loaded with the infectious fluid in the first and second stages of gonorrhœa, surely it must be more safe to suffer it to escape than to retain it as a fomes morbi. The tendency to metastasis which generally prevails during these stages, is another reason for omitting such injections as act by sup-

pressing the discharge, and the probability that gonorrhœa may be combined with chancre at an early period affords another. Added to which, if the theory of some be correct that every gonorrhœa is chancrous; upon that ground alone, injections would be inadmissible, for no one would depend upon the mere efficacy of a wash for the safe cure of an external chancre. In which way soever this matter be viewed, the impropriety of using such injections as put a total stop to the discharge in the first, and early in the second, stages of gonorrhœa must be apparent. It is better to permit the inflamed parts to be unloaded, under the relaxing, cooling treatment detailed in our first general method, employing mercury to the system or perinæum, after the inflammatory diathesis has been lowered by the means there mentioned in some habits; and having recourse early to mercury in others, where that diathesis does not prevail. The symptoms should all be upon the decline, from the general treatment, before injections are employed. And even then it may be of more advantage not to aim im-

mediately at the actual suppression, but rather at the amelioration of the secretion for some time.

If an injection be used early in the disease that would be the safest, which has no sedative power whatever; increasing the discharge without producing too much irritation: of that nature probably, is a very weak solution of the caustic alkali; this is a cleanser, without any sedative property, and may act chymically on the diseased mucus. But it is too stimulating, if not used before the coming on of inflammation; even then, it must be largely and accurately diluted. The solution of sublimate has been used with the intention of stopping the discharge; and, from a weak solution, it has been recommended to proceed to a stronger; it appears that this acts sedatively, and that the object by change to a stronger application is to stop the discharge.

I must remark that injections composed of *Calomel* are much less stimulating than those of *Hydrarg. Mur.* and when the quantity of calomel is in an over proportion to the water, its sedative power may be so great that this

may sometimes put an immediate stop to the discharge; with as much certainty as any astringent sedative whatever. It must therefore be employed in a small quantity, if the intention be to moderate the secretion without checking it wholly.—And (as has been hinted before) the clear liquor from an infusion of calomel in water may be sufficiently impregnated both with muriatic acid and mercury to make a useful injection of a middle kind, without that degree of sedative power which attaches to calomel mechanically mixed, and without that degree of irritation which the sublimate solution is apt to produce. The calomel used in any way should be thoroughly levigated with water.

If mistakes have happened as to the diagnosis of gonorrhœa, when there is an evident purulency in the discharge, (as I have endeavoured to show); what can be said to other secretions in which there is no such purulency? How many men have gleets before and during the formation of a stricture! are these, because the secretion may be sometimes after connection discoloured, or yellow and

pus-like, also to be considered as truly gonorrhœal? Is every new and accidental irritation from coition in such persons, because marked with purulency, venereal? Surely not.

If practitioners instead of the more powerful injections would be contented with clear tepid water, (if they are determined to use any) they would find both comfort and convenience without danger, during the first and second stages of gonorrhœa, or whenever they are under a state of uncertainty. But even an injection of this very mild kind may do harm, from the awkwardness of the person using the syringe, under great subsisting irritation and inflammation. Upon the broad basis of a general treatment, no accidents nor any material injury can follow, and the cure may be compleated within six weeks or less, even without any medicated injection—by both the general modes of treatment formerly pointed out.—This may be called by some a great length of time for the cure of a gonorrhœa, but the disease, when treated by injections only, often runs out to a much greater extent.

Every discharge from the urethra, not followed by that train of symptoms in succession described in our history of gonorrhœa, is of doubtful character, and may not be venereal, and the number of these is so great that they have often given unmerited reputation to a practice which if followed in a true legitimate gonorrhœa would do much mischief. But such equivocal discharges most of the injections now in use will take off, either partially or wholly, and it seems a very speedy and concise way of getting a cure for a clap. And if the cases are trifling, without ardor urinæ or chordee, the absence of these symptoms, when the injection is used early, is often attributed to its anticipating power; whereas the mistake is in not ascertaining the true nature of the disease at the outset. It was a gonorrhœa, but probably not of the syphilitic kind. In saying this I do not mean to be understood as asserting that there are no infectious discharges without heat of urine, or chordee at this early period. But it would be wiser to wait for more evidence of the disease than a purulent discharge, before the

injection is employed, for with that symptom only, the disease (if infectious) can scarcely be said to be formed.

In the true gonorrhœa the specific is capable not only of destroying infection by its application to the system, but of removing also every particle of discharge in many instances. And when the symptoms are particularly severe and pressing, I treat this seemingly trifling disease as any other acute one, and bring my remedies to bear, so that they may have a full power of action—during the most irritable, inflammatory, and dangerous states of the disease, and this, I have found from experience, to have a surprising effect in shortening the time of cure. There exists no doubt infection, but our first and second general methods of treatment may be greatly assisted by injections both of the mercurial and sedative kind. I prefer such as have mercury for their basis, never employing the astringent sedatives but at the close of the disease, when only a gleet without infection remains: at that period the latter may be frequently of the greatest service. In our natural history, the

disease was divided into two stages, and I endeavoured to shew what was the general state of the urethra in each stage. In the early part of the second stage, in the natural progress of the disease, there is a strong disposition to phlegmonous inflammation, considerable irritation in the passage, generally with the secretion diminished, and the chordee subsisting. I watch with great attention this dangerous period of the disease, and counteract it by enjoining quietude, and employing some of the various means of relief, fully detailed in our first method of treatment, which need not be now repeated. I do not recommend injections in the first stage, nor in this state of the second stage, but relying on general means of relief, and on mercury, I suffer the discharge to take its course. When the chordee has subsided, and the discharge is ameliorated or thickened, if the parts by this time have been sufficiently unloaded, and the irritation diminished, I use an injection of calomel and water. Sometimes alone, but more frequently with the calomel enveloped in mucilage of gum arabic, or what

is better, a small quantity of amylum. The symptoms being all on the decline, these applications tend still more to thicken the secretion, which being gradually diminished in quantity and altered in quality, this checking can do no harm, and the cure soon follows. And so permanent is this mode of cure, that the renovation of the symptoms is hardly possible.

If however this injection should not answer perfectly, leaving only a trifling gleet, the last remnant of departed infection, an injection of the *zinc. vitriolat.* will restore the weakened and relaxed pores to their usual healthy state. When the disease is thus treated, I am of opinion the discharge may be devoid of infection some days before it ceases entirely, even though some degree of yellowness may be perceivable in the mucus. It may seem extraordinary when I assert that a renewal of the symptoms after such a cure is hardly possible, but it is a fact. For inflammation and venereal irritation having been not only checked, but extinguished, by the general treatment in the first instance, the

secretion still continues to exert itself as an evacuant from the formerly inflamed and loaded parts. There are therefore several powerful means in action toward the cure of the disease, namely, an antiphlogistic treatment, with dilution, warm bath, opium, &c. when strongly indicated in the first place; the antivenereal power of mercury, to the system and part, under circumstances of inflammation, guarded and counteracted sufficiently, in the second; and in the third place, nature's great remedy, the increased secretion or discharge.—And after all, when the danger from inflammation and venereal irritation is over; there is a fourth means of cure, namely, the specific and sedative operation of a mild and powerful injection; producing its sanative effects without pain, without stimulus, and without that hazard which the sublimate injection is liable to. What is still more in favour of a general treatment is, that the cure will frequently follow without the assistance of any injection, provided the discharge be not suddenly or prematurely checked.—And as to the

accidents of the disease, they cannot happen whilst that continues in due quantity.

I may add that the *Bals. Capaiv.* alone, at the latter part of the second stage, will tend greatly towards a cure, by removing the gleet, and that troublesome degree of irritability of the membrane which keeps it up. The balsam should be enveloped in mucilage, and given with diluents, to obviate a too forcible action on the kidneys and bladder. And this medicine has often been joined to injections both of *Calomel* and the *Zinc. Vitriolat.* with the most perfect safety and the happiest effect, in the last stage of the disease. I never give it in any other.

I have quoted in a former part of this work *Piso*, as the author who has given long ago some hints as to its internal and external use; of the latter method of employing it in the form of an injection I have no knowledge. But of its internal efficacy, many very extraordinary proofs might be given. It is difficult to get it genuine, and there is great judgment required in its exhibition.— But it is certainly, when well applied, a very

powerful means of checking not only a gleet, but mucous discharges from the kidneys and bladder. Of like medical property is the *Bals. Gilead*. I well remember to have cured a lady who had made chocolate coloured water from her kidneys, and was sinking under the drain and mucous discharge, by combining this medicine with *Bark*—and she lived many years afterward—and did not at last die from the disease.

How different are the effects upon a true gonorrhœa, when treated from the earliest period of the disease by injections, whether of the mercurial or sedative kinds! If the patient be fortunate enough to escape the common accidents of injections, the treatment is frequently uncertain as to its effects, and tedious as to its duration. When the case turns out fortunately, it may seem a pleasanter road to health than that above described, but there are many rubs in the way; admitting that no ill consequences arise immediately, the time of cure, whether it be short or long, is passed not without some degree of anxiety and uncertainty. And if the

medical properties of the injection do not stop the discharge, according to the expectation of the practitioner, (on which stoppage many wholly depend) recourse be had to increasing the strength of the topic, this is neither always safe, nor effectual. The known acrimony of the solution of muriated mercury must necessarily limit its strength; and with respect to the calomel injection, it may act too sedatively, thus this also is limited, though not by its stimulus. But they both tend to suppress the symptoms without curing the disease absolutely, which often runs out to a considerable length, the discharge in a greater or less degree recurring the whole time. Nature, even here, shews her superiority over art, and though under the influence of these applications; she is constantly endeavouring to pursue her own course, labouring to evacuate what medicine has been striving to suppress with an obstinacy, of which those only who have depended solely on injections for a cure can form an adequate idea. The objections to this method are the accidents to which it is liable, which in my opinion

are insurmountable. But in the methods detailed and recommended above, there are comparatively none. The practitioner may here see his way clearly from the beginning, the symptoms diminishing and going on gradually towards a progressive state of amendment, and finally to a lasting cure.

What has been hitherto said, the reader will be pleased to apply to the true legitimate gonorrhœa, and to no other.

I must repeat, that every discharge, not followed by that concurrence of symptoms in succession which has been described in our history of gonorrhœa, may be of doubtful character; it may or may not be the effect of venereal infection.

When a gonorrhœa comes on without tendency to metastasis, without heat of urine, or with a slight degree of it only, and without chordee, the disease appears in a very different form from that above mentioned. And that it does appear thus frequently, with a discoloured secretion there is no doubt.—Of what nature is this discharge? This question is of some importance. If infectious, the virus probably

acts differently upon different urethræ. Thus, for instance, in a person who has a gleet, or urethra unsound, the natural irritability of the membrane may be so great, that upon receipt of infection it may not have the usual disposition of retaining it, as in a sound urethra. It may therefore neither ferment on the part (if I may use the expression) in the common manner, nor produce the more regular symptoms of the disease in their natural order; there being only a purulency in the discharge, perhaps with some slight degree of heat, consequent on the suspected connection. I think it probable that many such cases may arise from venereal infection, but there are many also which are not syphilitic. Injections in these cases have a remarkable effect, neither occasioning the usual accidents, nor disappointing the patient of a cure, (and to one legitimate gonorrhœa, there are many of this description.) These gonorrhœæ are therefore favourable to the practice of employing injections. But if the affair of infection be doubtful, the safer way even here is to wait, and attend to the se-

cretion and symptoms for a few days, and afterwards act as circumstances may direct.

The immediate application of a powerful injection in every species of gonorrhœa upon the first alarm, and before an accurate knowledge of the true nature of the disease can be formed, will perplex the judgment, and must end in uncertainty. These kind of cases have been frequently taken for and treated as legitimate gonorrhœæ, and when a cure follows they have given unexpected comfort to the patient, and credit to the practitioner.—But such are, I suspect, gonorrhœæ of a distinct species. The practice of employing injections early is certainly much safer in these cases than in the true venereal gonorrhœa, and to this distinction I hope the reader will attend. For amongst the aggregate number there are simple, and equivocal, as well as virulent gonorrhœæ. If there are equivocal gonorrhœæ as well as virulent, which I am convinced there are. If what was highly virulent in the first instance, may (as in Lues Venerea of a determined character) be broken down by mercury or medi-

cine; there may be different gradations or degrees of disease in gonorrhœa, though that may have been originally highly virulent. And these may produce from connection stronger or weaker affections of the urethra.

It has been supposed by Mr. Becket (see the Philosophical Transactions, No. 357—365, 366) that the origin of Lues Venerea, was anterior to the siege of Naples, and that it was in short known in this country, ages before this period. His arguments are plausible, but he has failed in the proof. He has shewn from an ancient manuscript, said to have been written about 1430, that what was then called the sickness of brenning or burning was common in the licensed stews of this city and its neighbourhood; of which in the reign of Henry VII. there were twelve, and before that period eighteen.—The fine imposed on the stewholder, who kept a woman in his house with this complaint, was a hundred shillings; no inconsiderable sum in those days. In a curious manuscript written on vellum, by John Arden, surgeon to Richard II. and Henry IV. about 1380, he defines the sickness of brenning

to be a certain inward heat and excoiation of the urethra. Arden considered the complaint as local, and his mode of cure was this, “*Item contra incendium virgæ virilis interior, ex calore et excoiatione fiat talis syrenga (i. e. injectio). Accipe lac mulieris masculum nutritis et parum zacarium, oleum violæ et ptisanæ, quibus commixtis per syringam infundatur, et si prædictæ admiscueris lac amygdalarum melior erit medicina.*” If as has been supposed, these gonorrhœæ were contagious, what was the nature of that contagion? Was it leprous, or was it analogous at all to what we now call the itch? Is it not most probable it was the effect of over exertion and want of cleanliness? In another manuscript, written also by Arden, it appears that caruncles in the urethra were anciently very common. And Mr. Becket, who has taken a great deal of pains in examining the old English writers and records of physic, has made no hesitation in saying that, the sickness of brenning was literally a clap.—As to this matter I leave every one to form his own opinion from what has been said. Mr. Becket’s idea of the remote origin of *Lues Venerea*

which he attempted to prove, First, from the description of the sickness of brenning, and subsequently from local ulcerations, phymosis, and paraphymosis, &c. and thirdly, from comparing the symptoms of the venereal disease with that species of leprosy, which is attended with an ozena or destruction of the nose, does not appear to me well founded. But he has shewn the strong analogy between Lues Venerea and lepra, and has proved that we had in this country, a species of gonorrhœa ages before the appearance of Lues Venerea in Europe. A fact of no small importance.

On the subject of gonorrhœa, I expected to have found something very clear and explicit in the writings of John of Gaddesden, (the author of the Rosa Anglica) for he has treated fully of diseases of the kidneys, bladder, and parts connected with them, and with uncommon accuracy for the time in which he lived, (from 1320 to 1340.) And I was not wholly disappointed; for if what he has called the *Apostema virgæ*, in the second note annexed, was not a species of gonorrhœa, I know not what it could have been.

His descriptions of the stone, and of the operation for removing it from the bladder are curious. And he has given a full and circumstantial account of the lepra, for which disease in his time, there were public receptacles called Lazar houses, not only in England, but all over Europe. This writer as Mr. Becket has truly stated, has mentioned the circumstance of infection arising from connection with leprous women, and his preventives may be seen in the first note, *De ulceratione virgæ*, page 927, Vol. I.¹ In 928 he

¹ Ulcera virgæ virilis proveniunt vel ex coitu cum juveniculâ vel ex coitu cum menstruâtâ, vel ex retentione urinæ et spermatis. Si ex coitu cum juveniculâ tunc utere unguento albo Rhasis et Lanfranci; si ex coitu cum menstruata inungatur cum oleo vitellorum ovorum, illud enim statim sanat. Sed si ibi sit calor et ardor, tunc cum oleo rosarum et pilis leporinis simul contritis conficiatur emplastrum vel cum aqua rosarum tepida lavetur; deinde cum panno lineo molli desiccet. Item ex calce viva sæpius ex aqua lota, myrrha ac thure, ana. Fiat pulvis et præmissa fomentatione ex aqua decoctionis foliorum salicis, plantaginis, vitis tepide superponatur. Radix, ungulæ caballinæ aquaticæ cocta et per modum caloplasmati imposita, unica nocte tumorem et inflationem sedat. Pulvis corticum mali granati impositus est optimus. Item canna per se tantundem potest. Cum succo hyperici fiat fomentatio et cum herba fiat cataplasma. In supercalefactione virgæ fomentetur virga cum

gives the cure for what he calls *Apostema*-

lacte caprino tepido et lanceolata superponatur in sevo arietino recenti frixa, vel per se torrefacta superponatur. Sed si quis vult membrum ab omni corruptione servare, cum a muliere recedit quam forte habet suspectam de immunditie, lavet illud cum aqua frigida mixta cum aceto vel de urina propria intra vel extra præputium. Item, R Vini albi boni lib. 2. viridis æris drach. 1. Auripigmenti drach. 2. Terantur postrema duo subtilissime et ponatur in vino illo et sæpius moveantur et reserventur usui: quanto antiquius eo melius, stante virtute vini. In illo vino madefiat pannus linius vetus et superponatur loco ægro: vulnus enim desiccat. Cancrum interficit et ulcera curat. Sed si ibi non sit, nisi sola excoarctio tunc pannus lineus vetus in aquam rosarum calidam intingatur et superponatur. Aloe curat vulnera et excoarctationem. Sic pulvis cucurbitæ siccæ, desiccetur alius pannus et superponatur. Pulvis olibani cum unguento Agrippæ superponatur; quia consolidat vulnera virgæ contracta ex coitu cum virgine. Si pruritus sit in virga, hæderam terrestrem, rosas, absinthium in aqua decoque et superpone. Si virga tendatur ex grossa ventositate, sicut ex immoderata ejus erectione, loco affecto calido existente. R—Ol. Rosar unciam S. ceræ part. 1. liquifiant invicem, et postea in aqua frigida lavetur massa, donec unguenti albi formam recipiat ungatur virga et loca circumstantia, si fuerint calida. Da patienti consumentia ventositatem; ut sunt agnus castus, semen rutæ, eyminum, anisum et similia. Si virga induretur vel alteruter testiculorum vel etiam ambo, tunc R furfuris tritici quantum vis fortitur pista in mortario donec fiat pulvis, distemperetur cum oxymelle ex duabus partibus aceti facto et una mellis, in quo ammoniacum dissolvatur; superponatur tepidum et sæpe removiatur. Valet in apostemate duro, in duritie splenis et in nodositate juncturarum et ideo in mente tua illud tene et memorie commenda, quia valde est utile.

Virgæ,² and in 929 the cure for the Apostema testiculorum,³ (probably a hernia humoralis.)

² Virga aliquando in apostema convertitur propter humores calidos et tunc adsunt pruritus et ardor: aliquando generantur ex humoribus frigidis et tunc adest laxitas et gravitas. Aliquando ex ventositate, quæ non cedit tactui et sentitur tensio fortis sine pondere. Igitur præmissa phlebotomia lenique evacuatione cura instituatur cum localibus. In causa igitur calida paretur initio emplastrum repurcussivum speciale hoc modo. R. Cort. Granatorum, rosarum siccarum, lentium, plantaginis, ana, drach: 1. coquantur in aqua et cum aqua dissolvantur, addatur ol: rosarum et fiat emplastrum. Succus solatri est bonus superpositus cum lana. Si dolor sit fortis fiat epithema cum lacte mulieris, oleo rosato, vitellis ovorum, et si necessitas requirat, adde apium, omnem sedabit dolorem.—Deinde fiat maturatio sic. Radix Jusquiami coquatur in aqua et teratur cum axungia porcina recenti et superponatus; idem facit radix altheæ et senetionis eodem modo preparatus. In causa frigida emplastrum expertum in principio hoc est. R. Ossium Dactylorum part. ij.—Altheæ. part. 1. terantur cum aceto et fiat emplastrum. Deinde fiat maturatio cum Rad. Lapatii acuti aut porri in aqua decocta et cum exungia veteri frixa, fluente autem sanie, ut libere possit exire ponatur in canali ipsius virgæ tenta de bombace, vel stuppa, et dentur in potu diuretica. Quod si fuerit ex ventositate et pauca caliditate detur in potu semen agni casti vel ruta, quia curat hunc morbum sufficienter.

³ *Apostematis Testiculorum Curatio.*—Testiculorum Apostema curatur eodem modo sicut apostema virgæ. Itaque a principio paretur emplastrum ex foliis caulium, cum farina hordei et vitellis ovorum oleo. Deinde fiat maturatio cum

I have not yet been able to go through this once celebrated work; but it appears to me, to have been written with great care, and by a man well acquainted not only with the works of the more ancient writers, but the Arabians. And he was the first English writer who has described the small-pox and measles.

The arrangement of his facts, whether these were taken from others, or conjointly with others, were the result of practice, with his powers of selection and discrimination, I know not but he has given, at a very early period of medical literature in this country, a work, as far as my researches have gone, valuable for its fidelity, and which in better hands than my own may lead, (I firmly believe will lead hereafter,) to the elucidation of what has been called the dark age of physick in this

farina fabarum, camomilla, althea, mucilaginis seminis Lini, vel ex farina hordei cum melle et aqua, tum resolvatur apostema cum passulis enucleatis et cymino, simul contusis et cum vino mixtis. Et notandum, quod in passionibus virgæ vel testiculorum, convenit peplum aut fasciâ, ne suspensio noceat, faciendo materiam currere ad locum dolentem.

Rosa Anglica, Ed. Augustæ Vindelicorum. Typis M. Mangeti. 1595.

country. His descriptions of diseases are short, but strongly marked, without verbosity or circumlocution, but with a certain degree of absurdity and error, in some points, common to the period in which he lived. He must have collected from documents in manuscripts long since lost, or now mouldering in the libraries of this and other countries. And, to his credit be it said, he has recorded a great number of facts without any tincture of the mystery and alchymical jargon of his day.

I have entered thus far into the labours of your remote ancestor to shew, that there may be local ulcerations of the pudenda now, as there were in his time, not chancreous; and also gonorrhœæ wholly unconnected with Lues Venerea.

REMARKS
ON THE LIFE
OF THE LATE
PERCIVAL POTT, ESQ.

IN the month of December 1689, this country lost, as far as a medical character can be called a loss, one of its greatest and most distinguished ornaments. After a life well spent in the daily exercise of a laborious profession, and after the strongest exertions of human ingenuity, in arranging, and with fidelity transmitting to posterity, the truths his wonderful sagacity had discovered, and the facts he had treasured up, died Thomas Sydenham. A man, who if due regard is given to the very weak glimmerings of true science for the direction of his first efforts, will probably be ever considered as one of the greatest instances of genius, united to an ardent desire of serving mankind, that ever existed; for it is difficult to say, which predominated

in his medical character, his benevolence or his skill. The principles he has taught are so clearly taken from nature and practice, that even after the lapse of a century, he is deservedly looked up to as a classic among the moderns. And in defiance of those systems and revolutions in medicine, which have since, from time to time, occurred, his observations still continue to be read, not only with pleasure, but much profit; and in this enlightened age are regarded as standard. Much has been said against his theory as well as some parts of his practice; and there are certainly points in both, not now defensible; but let it at the same time be remembered that he wrote at a period, by no means so generally informed as the present, and in a style and manner too plain and homely to suit the fashion of these days. And yet under even all these disadvantages, it must be allowed, that his was the rich mine, whence subsequent labourers have drawn the most valuable ore, of which the vein is still inexhausted.

The good effects of antimony in fever,

when given so as to excite vomiting, although he had no safer preparation than an infusion of crocus metallorum to work with, were nearly as well known to him as is now the operation of the pulvis antimonialis to us; and may have furnished the late doctor James with the first hint for using his powder. In fever, after the evacuating effects of his antimonial; in cholera, after a sufficient dilution and discharge of bile, and in many other cases of high irritation, Sydenham was a perfect master of the use of opium. To the effects of bark he was no stranger. And although he knew nothing of inoculation in the small pox; his own experience taught him the propriety of cooling medicines, fresh air and the antiphlogistic regimen: to obviate the irritation in the suppurating stage of this disease, he was familiar in the great advantages of the anodyne.

It is foreign to my present purpose to dwell long on the talents of this great man. I see the deplorable state physick was in at the beginning of his career. I see the veneration so justly shewn to his works, through-

out every civilized country since; and it requires no great penetration to foresee the influence these writings must bear, from their intrinsic merit, to the latest posterity.

From paying the due tribute of praise to the father of English physick, who rested from his useful labours at the close of one century, it was my misfortune to deplore, at the latter end of the last, the loss we have all sustained by the death of the greatest improver this or any other nation ever had, in the science of surgery. I scarcely need add the name of *Percival Pott*. A man in no respect inferior in his own line to the preceding excellent character, alike in native and acquired powers, alike also in that noble spirit of emulation natural to great minds, which first prompts to action, and then leaves the fruit of its own activity, to benefit after ages.

In the character of Mr. Pott, who had such full employment, there was scarcely a single hour of his life, that did not lead to something generally, and more than commonly useful, nor a page in all his numerous writings that has not the same tendency.

To form some idea of his uncommon exertions it must not be forgotten that when he was a student, the mode of a surgical education was extremely defective. Anatomy in this country was *then* only dawning. Haller, had not at that time, enriched science with his charming physiology. And, if we except Wiseman and the improvements made by Cheselden, which were afterwards extended by the late Mr. Samuel Sharpe, there was not an English writer on surgery fit to be read. The best authors were all French.

When Mr. Pott's education commenced, and for years afterwards, were to be had of those helps very few, (and I have heard him lament it most feelingly) which may now be obtained at every hospital, nay almost in every corner of this town. Dr. Smellie, I believe, was the only lecturer in midwifery, and Dr. Nicholls the principal in anatomy. No lectures were then given in London on the *Materia Medica*, Chymistry, or on the practice of physick; and whoever had not attended some medical university was forced to content himself with such information on these heads

as he could acquire by the assistance of reading and private practice.

During his youth, the best practice in surgery was to be seen in the hospitals of St. Thomas and Mr. Guy. That hospital, in which he so long served with such credit to himself and advantage to others, was then neither so large, nor so well attended as of late years. Indeed its celebrity as a school was in a great measure owing to his own abilities.

His professional education was merely surgical, with rough anatomy for its basis. By the latter term, I mean, that useful part of the science, which is only to be acquired by frequent and repeated dissections; that part which, without taking in the minutiae, teaches by imperceptible, but sure steps, a confidence in the management of the knife; and whilst it arrests and engages the attention, as a matter of philosophical curiosity leads to the more important circumstances of operating well; and appearing with ability in the theatre of an hospital.

In these at that time consisted almost the

whole of a London surgeon's education. For the art had not as yet been enlightened by a just pathology, and a general knowledge of medical principles. To this education, imperfect as it was; he owed that dexterity, which was sufficiently manifest through every subsequent epocha of his life. Whatever defects he may have discovered early in his education having been merely surgical; he soon supplied them by the force of his own genius. He paid assiduous and constant attention, not only to the improvement of the pathological and therapeutic parts in his own line, but to that assistance which these are capable of deriving from, and, in their turn, by a reciprocal action, giving back to the practical part of physic; and the advances he made in such respects may fairly be considered as a creation of his own. In no writer can we find more just, or more faithful descriptions of chirurgical cases, morbid appearances or symptoms, nor in any more clear, more apposite, or more certain remedies. In what work of surgery is there to be found a greater profusion of facts, capable of enriching the general stock of medicine?

The two professions of physic and surgery in London were generally distinct; to this distinction he conformed with most scrupulous attention in practice. But as he was far from believing that surgery could stand supported only by the pillars of anatomy and manual dexterity, no man read with more avidity every new book of the medical kind. He laboured incessantly even to a late period for his own improvement in the knowledge of the practical part of physic, by study; and this he did, from a conviction such knowledge would enable him not only to direct with greater propriety and effect in his own line, but by the collision of the two, new lights might be struck out tending to the advantage of both. He was highly informed in every branch of anatomy, physiology, and physic, which had either an immediate or remote connection with surgery, and was so thoroughly master of the proper application and effects of medicine, that he could employ it, with uncommon readiness and success to the various chirurgical cases that daily came before him. And his physic was as good as his surgery, neither frivolous, nor

tinctured with quackery, but such as our countryman Sydenham might with safety have recommended without a blush, and without any impeachment of his acknowledged abilities.

I must rank Mr. Pott amongst the benefactors to physic, and the truth of that title may be proved from several passages in his writings. To what do his very excellent observations on the nature and treatment of what he calls a slough of the common membrane, as stated in his *Treatise on the Fistula in Ano*, tend? To what his observations on the mortification of the toes and feet? To what, not to mention many others, the caustic in the palsy of the lower extremities from a diseased spine? but to enlarge our stock of medical as well as surgical knowledge. To the practical abilities of the surgeon in him were united to a certain, and that by no means an inconsiderable degree, the no less valuable acquirements of the physician, and it was purely owing to his great multiplicity of engagements in surgery almost from his first entrance into it, and his so strictly keeping, from a principle of honour, to that

branch only, that this part of his character was not much more apparent.

His demeanour towards his patients was polite, open and manly; actively humane, but without servility. He was an enemy to all cant and hypocrisy, and although he felt as much as any man, he could never condescend to whine over a patient; as these were arts he never practised himself and disliked in others, so when they had been played off before him, he would sometimes comment on them with all the ridicule of contempt.

It must not hence be inferred that he wanted an high degree of feeling, for it is a known fact this was so great, when he first cut for the stone, that a jaundice was the consequence; and many were the uneasy nights he passed prior to the performance of every operation of difficulty or danger. "If ever (he said) you attain a certain degree of rank in your profession, what you will undergo in the rugged path of your duty will cause you much heart-felt uneasiness." And the anxiety he felt whenever these trying occasions presented themselves is best known to those.

who shared his confidence and were honoured with his friendship.

Too good a surgeon to be a rash operator, he was very careful and nice in distinguishing the circumstances requiring the aid of the lancet; but when an operation became absolutely necessary, he was as attentive to the due execution of it. He was as dexterous with the left hand as the right, and could couch extremely well with both. His discernment, upon the appearance of unsuspected circumstances, was keen and quick; his hand was perfectly steady, and equally good as his eye, with a judgment sound, and unruffled amidst the greatest dangers. Indeed he excelled in this part of surgery as in every other; and could go immediately with the same facility from the more coarse and laborious to the most minute and delicate operations; and he performed them with an adroitness and dispatch, which though uncommon, seemed perfectly natural to him: but his opinion was, that the hand should never outstrip the sight and judgment; and that every operation was soon enough done that was well done. I remem-

ber his cutting for the stone publicly with singular dexterity and success before the late Le Cat of Rouen; who was himself one of the first Lythotomists in Europe. With his stop watch he noted the beginning and termination of the business, and expressed much pleasure at the manner and expedition with which it was performed. But Mr. Pott, when he afterwards knew the circumstance, could not help animadverting on his folly of using a stop watch on such an occasion.

His opinion was that a surgeon should not only be manually dexterous at an operation, but know the most probable means of preventing it; that he should endeavour, if possible, to render them not only less painful and hazardous, but less frequent; and on the knowledge of the proper means of obviating them, he has said, much of the surgeon's reputation and success in life would depend.—In surgery as well as physic, the practical parts of both lines stand alone; objects in their own nature and magnitude of sufficient consequence to engage the most capacious and active mind. He had culti-

vated anatomy and physiology with sufficient ardor, but he paid very little attention either to botany or chymistry. These were left for more substantial practice; and the admirers of the preliminary sciences to medicine (and I must consider surgery as no inconsiderable part of it) will, I hope, excuse me in saying, that the branches are now too big for the body of the tree, which tree is suffering in its vital parts. We have a botanical arrangement exceeding, with respect to the descriptive parts, all moderate bounds, without an adequate or corresponding knowledge of the medical properties of the subjects classed. A chymistry, which however generally useful, curious as an art, and greatly improved, has thrown very little new light on the cure of diseases; and is at length become so very extensive, that to comprehend it thoroughly would be the business of a life. An anatomy, which seems tending to speculation and unimportant disquisition, perplexing the mind and diverting the attention from the most obvious and highly useful parts of the science; and it may be remembered that these parts were the ful-

cra which once gave steadiness and success to the hands of a Cheselden; a Sharpe, and a Pott. A physiology, which delights more in the minute parts of the creation, than like the great Haller, in delineating the economy of man—a surgery, which without the utmost care, will soon degenerate to a state in which anatomical dexterity alone, though only one of the requisites in forming the character, will take the lead, throwing down all those useful fences, which the wisdom of those, who from a more attentive consideration of the efforts of nature and resources of art in chirurgical diseases had raised against a too free and licentious use of the knife. And in place of that general knowledge which practice, and practice only can give, and which can alone teach us how to obviate the severities, and moderate the terrors of this unpleasant and painful branch of surgery, some of our young men are, I fear, verging to a single point, and becoming *mere* operators. Thus the most useful part of the science may probably suffer by the change.—I say most useful, for the practical man knows, that the opportunities of perform-

ing an operation are comparatively very few, when opposed to those numerous cases in which the safety of individuals will depend much more on the Surgeon's having a critical knowledge of the natural rise, progress, and termination of such diseases as may come under his inspection; and on the practicability of curing them by medicine or the adoption of surgical ideas on medical principles, than on his powers of operating. If it be allowable to say that English surgery has a decided advantage over the same profession as practised in France and some other countries, it is not because we are better anatomists than the surgeons of those countries; it is not because we are better operators; but because our knowledge of diseases and remedies is more correct and extensive. We view the science through the medium of physic; they, through the medium of anatomy only. Far be it however from me to say, that the operative does not make a very important part, or that a general knowledge of anatomy is not absolutely necessary, both to enable the artist to operate well, and make him ac-

quainted with many diseases and accidents that may come under his inspection. But this knowledge, like the science to which it is more particularly applicable, should be sound and practical, acquired principally in the dissecting room, neither trifling, speculative, nor too minute.

Mr. Pott's powers as an operator, though confessedly great, were subordinate parts in his own estimation, for he always looked forwards in surgery to something more than anatomy or the eclat of operating. He knew perfectly well the limits and scope of the science, and could on every occasion separate the chaff from the grain. His pursuits were by no means leading either to the minutiae, or nugæ naturæ, but immediately, or remotely, to the preservation of health and life, in a great public hospital, in a very large share of private business, and in the no less arduous and difficult situations of lecturer, consultant, and author—an author, who wrote from what he had seen—not from the sportive lucubrations of twenty years of study, but from the well acquired labours of

more than half a century, employed principally in the contemplation of practical surgery.

From what has been said it will appear that life is too short to follow up and embrace, what may be called useful studies; and that it is not consistent with our nature to grasp at universal knowledge; that too much time should not be spent, nor stress laid, on the preliminary parts of medicine or surgery; that the less useful should give way to what is absolutely and indispensably necessary, not only in a professional, but in a moral and religious light. And that the practical bed-side knowledge, in every branch of physic, is not only that by which we must live, but that by which we can most effectually serve mankind; compared with which, lesser acquirements, though they may have their proper weight in the general scale, should not be suffered to preponderate.

Mr. Pott, like Sydenham, was an enemy to all theory and hypothesis, guiding his footsteps with the same caution, namely, by the genuine appearance of diseases and the effects of remedies; and although sufficiently skilled in anatomy and physiology, he never,

from an over refinement, gave them place where the sacred authority of experience only should be allowed to preside. The same sound judgment, blended with uncommon sagacity, which is every where conspicuous in the works of the one, may as clearly be traced in the writings and practice of the other; and they seem to have gained information, though in different lines, by following nearly the same practical road. With equal justice and propriety as Sydenham blamed the mode of some practitioners in his time, might Mr. Pott have objected to some of the prevailing surgical notions of the day. In him may be observed the same inflexible adherence to practical truths, whether these truths respect the natural appearances of diseases, accidents, or the application of the necessary means of cure. And he was fully aware of the great necessity of supporting practice, by a sufficient number of well authenticated facts, drawn from cases, actually seen and attended.

A mind so closely occupied as his was, with the great object of practice, had but little labour in writing what had been pre-

viously well digested. He was so perfectly master of his ideas and of language, that whatever was once committed to paper seldom required an alteration: and with regard to some of his productions latterly, I can say they were so correct, that a single reading was all they wanted before they went to the press. He composed with as much ease as he wrote a common letter; and this will, in some measure, account for a circumstance that has surprised many medical persons, namely, how a man so deeply engaged in business could have written so much, so well. In the first place he wrote every treatise separately, at different periods of a long life. In the next, contemplation in him led immediately to action. What he had once clearly perceived was, in a public hospital, soon brought to the test of experiment, and when it had passed the trial, was speedily promulgated: for he had no professional secrets. When, from the superiority of his knowledge he had made up his mind on any subject, as to its general utility, he was uneasy till he had made other men as wise

as himself; and the great work of his life was an endeavour, both by example and precept, to communicate *all* he knew.

As a consultant surgeon, he was an illustrious example to all other men, in that respectable line; and here, the fairness of his conduct, and his superior powers, were eminently conspicuous. He had a just sense of the dignity and importance annexed to the character, and although he was sometimes ill-treated for a very honest opinion, given for a mere trifle, where his reputation too frequently depended on the caprice or sagacity of others, he never complained. How much soever he may have suffered, from the difficulty and danger of the situation of being allowed frequently to give a single decision only, on cases of the greatest delicacy and importance—he patiently submitted to a routine he could not alter. But whatever his sufferings may have been in this respect, the discerning part of mankind and the profession did him ample justice: for, I believe, there never was a surgeon in this or any other country, whose opinion was so frequent-

ly solicited, or more generally followed.—By a steady habitual attention to the important, general, but without neglecting, or disregarding the most minute circumstances of practice; and by the largest and most comprehensive views, his judgment was so fully matured, that for many years preceding his death, it directed him, almost intuitively, to the object of his pursuit; and enabled him to unravel instantly the most difficult and complicated case—a pitch of mental perfection to which heavier mortals may aspire in vain. In the daily exercise of this judgment he was clear and collected; and often decided without the smallest appearance of hesitation or doubt. His enemies (and no man is without enemies) have said he was sometimes too hasty. *Non possumus omnia.* In the multiplicity of business with which his mind was daily and hourly occupied, as a surgeon of an hospital of no inconsiderable size, as a teacher, consultant, and writer, it is not to be wondered at if he had not always patience to hear a tedious unimportant detail, when from his superior know-

ledge he had previously formed his opinion from the sight and touch. And however novel the idea may appear to persons not conversant in surgery, this was his, and it is probably the best mode of judging without bias, and must very often have superseded the history, rendering it unnecessary. Correct himself from inspection as to the great outline, he could look back to what had past, and foresee future consequences: and this will more particularly apply to that part of his business which depended on consultations. Quick and ready in discriminating, he certainly was, to an astonishing degree. But this happy faculty, how much soever it may have been mistaken in him, was only the natural consequence of a mind fraught with general information, and the ultimate effect of consummate abilities, ever usefully applied. A faculty that should rather excite our praise than our censure!. For it is the distinguishing mark of a character above the common level; the greatest men in every age have possessed it, and it was, I have no doubt, as conspicuous in Sydenham or Ratchliffe as in Mr. Pott—A man endued by

nature with extraordinary powers, long accustomed to business, daily viewing the same appearances, and contemplating for many years together similar occurrences, will readily understand, apparently without labour, what he has been so long in the habit of investigating; and he will not only perceive quickly, but will discriminate with accuracy, and judge with a firmness and precision, of which an ordinary man can have no idea. This shewed the vast extent of his chirurgical knowledge, how fully he had settled in his mind the leading points of practice, and how carefully and well he had traced every part of the great scientific circle.

He was as clear, decisive, and as thoroughly informed on the subject of Lues Venerea and Gonorrhœa, and the various methods of treating them, as on every other part of surgery—Appeals in the last resort on these subjects were constantly made to him from every quarter, and even from foreign countries.

I lament exceedingly that his other avocations did not allow sufficient leisure to publish any thoughts on Lues Venerea, diseases

of the bladder, and what he called inquirenda on the gonorrhœa.

Upon the first subject, I believe, he never intended to write; with regard to the second, long before his death he told me he had destroyed as many papers as filled a large box; and as to the third, which he mentioned more than twenty years ago, I could never learn why he relinquished what from his conversation at the time he certainly meditated—but which I believe unfortunately died with him.

In the treatment of Gonorrhœa Virulenta Mr. Pott very frequently employed injections of various kinds; he was fully aware of the propriety of an antiphlogistic plan in this disease, he generally gave an internal mercurial, as an alterative in small doses, but whenever the prostate was affected he used mercury with greater freedom.

As one, among many instances of this gentleman's extraordinary discernment and sagacity in Lues Venerea, I must mention the case of a military officer, which many years ago I had noted amongst other memoranda.

This patient was emaciated to the last degree with pain and disease; his complaint appeared at first sight to be an enlargement of one of the thigh bones, which was spread out to a very considerable size. By the opinion of several eminent physicians and surgeons, amputation of the limb had been strongly recommended, as the most probable means of saving life. Upon the presumption that the complaint was rheumatic, he had been sent to Bath; to the sea, &c. but returned to town without finding any relief, his complaint having increased considerably. Mr. Pott said on his first visit that he did not like to pronounce positively on a disease from one symptom only, but he was much inclined to believe it was venereal, and asked the patient about other symptoms or appearances.—“Yes,” said he, “my head is sore.” Upon examination, the cranium was found carious in two or three different places. Mr. Pott then declared that the disease was venereal. The patient inquired, whether he could serve him? He answered, he was very much afraid he could not—but advised him to

send for his friends, in order that the circumstances might be fairly stated, that no blame might attach on the attempt to cure if it did not succeed. The statement was made, and the trial of mercury determined upon.

He began with Ung. Hydrar. fort. ʒss omni nocte, decoct. sarsaparill, to which was added a handful of hartshorn shavings, indies—he took also a slight preparation of bark, and calomelas, gr. ij. every night. After having pursued this method for a fortnight, Mr. Pott found the pain diminished—the strength increased—pulse stronger, and the tumour lessened—and then could with confidence promise success.

He went on without any remarkable occurrence till his mouth became thoroughly sore, (an effect of mercury which Mr. Pott constantly endeavoured to produce) and in two months was perfectly well. The great weakness, and the very reduced state of this patient, induced him to begin in a much more cautious manner than usual. Generally his method was to begin with a larger quantity of mercury, to which he commonly joined the internal mercurial as

above, and he went on without intermission till a fair salivation arose, or, as in the Idiosyncrasy not disposed to salivate, till the disease was cured without it. His ideas were taken from the most enlarged views of practice, that practice I know was generally successful, he surmounted by a broad line of conduct the defects of every less powerful, subordinate method; and the first and most valuable piece of advice he ever gave me when a young man, in the treatment of all obstinate venereal affections, was to make the mouth, if I could, thoroughly sore. He always wished to see the cheeks swollen and puffy; and from the number of relapses that came to him from other practitioners, even of great name, which he cured, I am convinced he could not have been so very successful as he undoubtedly was in any other way.

As Mr. Pott generally began with a considerable dose, namely, Ung. Hydrar. fort. ʒj.—Calomelas, gr. ij. indies—he was sometimes, when by no means intending such an effect, surprised by an early and premature salivation; in which case, if it was not very violent, he

seldom desisted from mercury, but went on, depending on the height of the affection, and the effect of such quantity of the medicine as he could, without stopping, introduce afterwards for a cure. And whoever considers that formerly when sudden unqualified salivation was the mode of treatment, as may be seen in Sydenham, Boerhaave, and other writers, the dependence was placed, not on a large quantity of mercury, nor on its gradual accumulation; but principally on the affection of the mouth from a small quantity: and this was probably the reason that the former of these writers laid down the rule—“*Quod lues venerea solâ salivatione curatur.*” The truth perhaps is, although a quick and rapid effect from mercury in habits I have called scorbutic, does almost constantly fail to cure, yet effects nearly similar, in other habits not so much debilitated and broken down, have certainly, and that frequently cured the disease: and if that had not been the case, the old method of salivating could never have succeeded so often as it did. The event with respect to Mr. Pott's practice was precisely this: whenever the pa-

tient was of that happy kind of habit not to salivate too readily; yet with a natural propensity to have his mouth affected; (and that disposition in the mass of mankind is perhaps most frequently met with) there his method answered wonderfully well; and some of the worst symptoms of the disease, I here repeat, have been cured perfectly both by him and myself within so short a period as three weeks, or little more. When I speak of this method, I do not mean to say it was peculiar to Mr. Pott alone. Some years back it was, with little variation, almost universally followed by surgeons who were most conversant in venereal business, not only in public, but in private practice; and why it has fallen so much into discredit of late years I know not. It certainly possesses many advantages well deserving the reconsideration of the faculty at large.

A Gentleman had a considerable ulceration, and so great an enlargement of the tongue, that it had increased to double its natural size. The ulceration had continued for seven years, sometimes better, and sometimes

worse. Some years before he applied to Mr. Pott, he had been under a mercurial course, after the Montpelier method. He rubbed in, but his mouth was not suffered to become sore; for when affected only in a slight degree, he was ordered to desist, and go into a warm bath, and his bowels were kept open, &c. This course nearly healed the sore, but not quite; the enlargement of the tongue also subsided; but the truce did not last long, and in little more than a year the disease spread again to a greater degree than ever. He now, by Mr. Pott's direction, used mercurial frictions, and also the internal mercurial in his usual manner. The specific produced ulceration, copious flux of saliva, &c. On the 20th day, the venereal ulceration was fairly healed, and the enlargement gone. He underwent the course in summer, and on the 24th returned into the country perfectly well, his mouth being then very tender, and overflowing with the salivary secretion. There was no after treatment whatever. I had the satisfaction of seeing this gentleman perfectly well, as to the former complaint, three years after this course, but re-

cently affected with chancre, which yielded without difficulty to common treatment.

Since that time I cured another person in the same way, and in as short a space of time, of a large spreading ulceration running from the left cheek to the nearest angle of the mouth, which was the only symptom, and which Mr. Pott agreed with me was venereal, although it had been said to be cancerous; also a venereal sarcocoele combined with venereal eruptions, a gummatous thickening of the triceps muscle, with sarcocoele, &c. &c.

According to the best observations I have been able to make, when the patient has been of a habit with little or no tendency to salivate, there the quick and free introduction of the medicine within the time above specified, has even, in the worst cases, appeared more likely to succeed in curing than a more gradual and cautious mode of procedure for six weeks or two months. When, however, after the employment of full doses of mercury for a fortnight or three weeks, no considerable affection of the mouth fol-

lows, nor appearance of cure takes place, there we must pursue *one* of *two* methods — we must either continue the treatment for five, six, seven, or eight weeks, even under confinement, suffering such treatment to assume the alterative form or type, or push the effects of the specific to the utmost between the end of the second and termination of the third week, so as to produce some of the decisive effects of mercury within the space of five and twenty days or a month; and when the external use of mercury becomes inert, the object may be attained by giving full doses of mercury internally. — I have been informed by a surgeon of reputation, who formerly practised in India, where it is impossible to confine a person, or avoid opening the windows and doors, that the cure of venereal symptoms seldom took place till the seventh or eighth week, and then they went at once, with very little affection of the mouth, the effects of mercury going off principally by increased perspiration and a kindly diarrhoea. I must however remark, that the mercurial employed

was constantly calomelas. And when any difference from the above progress followed, it was always occasioned by irregularity, which in all countries will produce anomalous symptoms: and the same kind of tendency in certain constitutions to assume what may be called the alterative type, holds good in this country, even under confinement. But when a quicker and less tedious effect can be produced, within three or four weeks, I should, in many cases, prefer it, and that for the following reasons: when a person has used an alterative plan of cure, (for such it too frequently is,) although followed under confinement for seven, eight, or more weeks, the effects on the mouth and system do sometimes become stationary, though the quantity of mercury daily used may be large. In which case there are circumstances in the constitution operating against the proper action of the specific, which greatly lessen, and may indeed destroy for the time its antivenereal power. These are the production of a slow and gradual weakness, and the generation of what may be called a scorbutic diathesis, by the

constant confinement of the patient, whilst his system is daily irritated by the medicine. When a person under cure is in this state, and the symptom does not give way, there seems to be only one of two courses to take, either to push the medicine to the utmost under his present weak state, or desist entirely for a time from mercury, mend the habit, and when the health is sufficiently restored, attempt to produce again the antivenereal effects of the medicine within the month; and then the cure will probably follow—the disease too much habituated to the old, giving way to a new, very different, and more violent action.

The weakness I must repeat inseparable from an alterative kind of course under confinement, is much more permanent than that occasioned by a quicker introduction and operation of the medicine within three weeks or a month. In the latter the surgeon may speedily obtain all that mercury is capable of doing in lues venerea, with a strong tendency afterwards to a rapid convalescence. But in the former the circumstances tending to a cure and convalescence are very different; and it must be

noted that, sometimes the cure does not take place, unless the medicine produces its decisive effects at the end of the course; even although that course may have continued two months, or longer. And I remain of my former opinion, that whenever the constitution favours the quick introduction of mercury, so as to effect a cure within a month, that plan may often be adopted. It may for the cure of an obstinate symptom be sometimes more painful to bear, but it occasions much less injury to the constitution; and is, I believe, in ozæna—in spreading ulcerations, and in some other cases, which were formerly pointed out, much more efficacious than any other. We frequently want in mercury a strong and violent action to alter the course, and check the progress of a diseased appearance; and although this medicine, when used as an alterative, may to a certain degree do this, as in the patient with the ulcerated tongue, yet the recurrence of the symptoms and cure of the disease generally require more powerful effects. Many years back I was sent for in haste to a gentleman under Mr. Pott's care,

who was said by the servant to be dying. He was under a mercurial course for venereal ulcerations of the tonsils—frictions had been used largely and repeatedly, to which had been joined internal mercurials—calomelas and crude mercury, mercur. alkalis. &c. and after this very forcible action of the medicine for near a month, the ulcerations shewed no disposition to heal, but were stationary; the patient was much reduced both as to his strength and flesh, and he was become extremely irritable; but with very little affection of the mouth. Under these circumstances he was directed to use a cinnabar fumigation to the throat. In the evening of the day on which he employed this topic, he was taken extremely ill, with sickness and tendency to vomiting, great depression of spirits, and what Nicholas Massa has called *lassitudines semisyncopales*. He was put immediately into a warm bed, and took *phlo-nem*. On the next day I found his mouth more sore—his tongue superficially sloughy at the sides—But the venereal ulcerations

were healing; and in two or three days he was cured both of the disease, and effects of the remedy.

*Additional Remarks on Strictures of the Urethra,
the use of common Bougies, and on such as
are armed with the Lunar Caustic or Kali
Purum.*

Before the first edition of the foregoing work, much very interesting information had been given by Mr. Jesse Foot, on the management and cure of Strictures by means of Bougies, but more particularly of such as were small and made of catgut. And when this malady can be thus relieved for a considerable time, or permanently, it may supersede all applications of the caustic kind.

This gentleman's observations lately published, on a mode of injecting the bladder by means of a hollow bougie and elastic bottle, are well worthy the attention of every medical man who has seen the great distress arising from an injured and too contracted bladder, or morbid affections of its mucous membrane, and I give Mr. Foot great credit for the thought. There are many cases of high irritation, in which it would be of singular service to inject an opiate or sedative directly into the bladder. I had some time ago a case of an affection of the mucous membrane of the bladder, but whether connected with stone I do not know, the patient being unwilling to be searched. He had constant inclination to make water, doing but little each time, and the

urine when first made was like whey, but upon standing deposited a very considerable quantity of thick discoloured mucus which adhered to the bottom of the urinal. His prostate was not diseased, but upon attempting to pass a middle sized bougie I felt at the bulbous part of the urethra a stricture, and after having introduced it, I found he could bear it in the urethra but for a very short time. The stricture was of a peculiar kind. For after I had made a certain progress, the bougie rubbed as it went on for a considerable space, and gave a sensation to my fingers as if it went through something soft and spongy, but no blood ever followed. In a month I could with ease pass it not only through this, but also through the membranous portion of the urethra and neck of the bladder, in which there was no obstruction. And a bougie of a large size went with facility into the bladder. I supposed at first the case to be stricture, and the mucous discharge connected with it; and such being my idea, it was natural for me to expect that the symptoms would remit, or go off upon thus, without much difficulty, having made sufficient way into the bladder—but no such events followed; the frequency of making water was not relieved, nor was the mucous discharge much altered or lessened. The case was afterwards considered an affection of the mucous membrane of the bladder itself.

And upon this ground I proposed making use of Mr. Foot's mode of injection. But I was over-ruled. This case, except as to the obstruction, was very like Mr. Foot's fourth case in the *Vesicæ lotura*, in which his method succeeded.

In Mr. Samuel Sharp's *Critical Enquiry*, in Mr. Bloomfield's works, and in Mr. John Hunter's *Treatise on the Venereal Disease* may be found many highly useful observations on strictures, and these several writers should be carefully read by the student before he ventures to apply a caustic to so tender a part as the urethra.

Mr. Home's two treatises on the application of the lunar caustic to strictures, contain a great mass of information tending to shew the advantages of this new mode of practice. And we have had lately also by Mr. Whateley two ingenious pamphlets, namely, one on the subject of the lunar caustic, with remarks on Mr. Home's method; the other on the efficacy of the *Kali purum*. As it is not my intention to interfere but as little as possible with the labours of these gentlemen, I shall endeavour to condense what I have to say further on the subject of curing strictures within as small a compass as I can; and must refer the reader for more particular information to the books in circulation as to the subject of caustic.

Mr. Home in following up the idea of Mr. John Hunter, and in extending it to a great variety of strictures; the general circumstances of those strictures, and the detailed effects of the lunar caustic are highly instructive and cannot fail of leading to a more successful practice in some *obstinate cases*, than has hitherto prevailed. Let it be remembered he raised the edifice on which improvements are daily making in the treatment of strictures by means of an armed bougie. He not only deserves great praise for this, but for the very fair and candid manner in which he has given the result of his general practice; both when the events were unfavourable as well as favourable—and much good has arisen from it; though it must be confessed not without some partial evil.

I have formerly observed with what certainty the painful consequences of stricture were relieved by the gradual operation of a common bougie, when a fair passage could be made by it into the bladder. And in the more distressing cases, when that instrument is not attended with the wished-for success; it is surely of some consequence to know, that by Mr. Home's method or a modification of it, the great object of widening a stricture, so as to facilitate the progress of a common bougie, may be attained! And here I must re-

quest the reader would distinguish between the application of it, to a stricture anteriorly, or within the bulbous part of the urethra from the extension of it far into its membranous part or neck of the bladder. It should be confined if possible to the former only—and as to carrying on its immediate action into the bladder itself, it would be highly dangerous on many accounts—I will suppose a way having been made through the stricture at the bulbous of the urethra, (if the obstruction extend so far,) the rest may be left to the cautious management of a common bougie. I must consider this as a leading principle whether the attempt to overcome an obstinate stricture be made by the lunar caustic, or kali purum—if the surgeon should be fortunate enough to free the neck of the bladder from distress, by removing the stricture at the bulb, or before he comes to it, the principal difficulty probably may be over. He may afterwards wait patiently the gradual operation of a common bougie.

That pain, hæmorrhage, strangury, &c. have arisen sometimes from the use of the lunar caustic is allowed, and may be accounted for. At these accidents no man can wonder; but my astonishment was, that such had not happened more frequently. That it has been applied, and effected cures, without the smallest

danger or similar consequences following, no one will deny ; and that a quicker progress may be made in some strictures by the cautious and repeated touches of this application, there can be no doubt.

In favour of the new practice, is it not well known that some strictures are of so stubborn a nature that no common bougie, how judiciously soever it may be applied will make a proper impression ? I am sorry to say, I have seen many of this description. Here it may be said, the lunar caustic may come in, in preference to more violent methods. But whatever effect it may have on the greater number of strictures not so circumstanced, in which a safe reliance has been long placed in the action of a common bougie, is worth the inquiry of every surgeon. In answer to such persons as condemn the lunar caustic wholly, it may be said, that the four most useful remedies we have, namely, antimony, opium, mercury and bark, may do much good or much harm ; but time and reiterated experience having developed their good and bad properties, they are now employed with precision, and with the best effects, even in many almost desperate cases. So will it be probably with the lunar caustic in diseases of the urethra, whenever the effects of its application are more clearly understood. But at the same time, I am no friend to

its indiscriminate use in cases curable by common bougies. And it must be confessed there are certain modifications, and the observance of some well known means of quieting irritation and inflammation, requisite to render it more safe and more extensively beneficial.

I shall pass over the description of stricture given by Wiseman, and his practice in this disease, with remarking that he employed a grain of lapis septicus through a canula, to remove the complaint. This probably was not the lunar caustic, but the kali purum. And the like accidents followed his method, as have sometimes followed the method recommended by Mr. Home.

The justly celebrated Mr. Samuel Sharp came after Wiseman, and has left us some truly excellent observations on strictures, and the use of bougies in his critical enquiry. This like every other part of his works is admirable, and cannot be read too often or with too much attention. Some modern surgeons doubt the existence of ulceration, excrescences, fungi, and carnosity in obstructions of the urethra, and they have substituted nothing in place of them, but the words contraction or stricture—I am strongly inclined to believe, however, that there are not only ulcerations, but fungi, warts, and from the growing together of the cells of the

urethra, through inflammation, carnosity or callosity in stricture. And upon this ground, the action of the lunar caustic may easily be accounted for, and its effects in stricture explained—A stricture considered abstractedly is a plain idea, but stricture connected with the circumstances just mentioned conveys a great deal more, and gives a more just notion of the disease. “I believe,” says Mr. Sharp,* “it will seldom happen that caruncles are not accompanied with either a stricture, callous cicatrices, or protuberances of the corpus spongiosum urethræ, in which the caruncles make only a part of the obstruction, and possibly may not be bigger than the head of a pin. But those who have examined the urethra after death, expecting to find them of considerable bulk, and not meeting with such, have in all likelihood overlooked these small appearances (probably diminished also by death) and concluded there were no such things. That such small excrescences may occasion violent disorders in so tender an organ as the urethra, I have had occasion to see a notable instance of in a virgin; where they grew in a small quantity upon the orifice of the meatus urinarius, and for many months had produced the most ex-

Vide Critical Enquiry.

“cruciating torment, which continued till I had
 “totally extirpated them;” again he says, “I have
 “opened urethræ where the existence of carunc-
 “cles was evident—he had also observed a fila-
 “ment near the verumontanum running across
 “the urethra; in another case other filaments
 “—and in a third a small excrescence, not un-
 “like one of the tricuspid valves of the heart.
 “Even Mr. I. Hunter confessed he had seen,
 “though rarely, caruncles, and something like
 “warts upon examining morbid urethræ.

“Daran’s first cause of stricture, he calls re-
 “courcissement de fibres de l’urethra; then
 “follow callosity, cicatrices or carnosities, car-
 “uncles, excrescences, and ulcers of the ure-
 “thra, &c. It has been said lately that Mons.
 “Teytaud has, by actual dissection, found ulcers
 “of various sizes, with callous edges, fungus in
 “the urethra, cicatrices of former ulcers, and con-
 “traction, impeding the passage of the urine.”

Such, therefore, being what may be called the
 theory of the disease from these writers; it
 makes rather for than against the practice of
 employing the lunar caustic. Some observa-
 tions from the two last named authors have been
 quoted, to shew the superior advantages of the
 bougie over the lunar caustic; whereas those
 very observations tend to prove the contrary.
 And in answer to some remarks by a late writer,

Mr. Home might say, if caruncles, if callous cicatrices, or protuberances of the corpus spongiosum urethræ, if fungi attend on that contraction of the canal called stricture—if the excrescences are tender and painful, does it not follow that the application of the lunar caustic may probably remove them?—Does it not also account for that morbid irritability of a particular part, frequently met with in stricture, which does not bear the bougie well?—whereas, after the application of the lunar caustic, that irritability is frequently diminished—Why is it diminished? because the caruncle, though small and (as Mr. Sharp expresses it) not perhaps larger than a pin's head, no longer exists to keep up irritation. The pressure of a bougie may in time wear away such caruncles, but the caustic effects its purpose speedily, and with more certainty; and needs only a superficial action. That Daran's, or any other bougie, may gradually open, and enlarge a contracted part of the canal, is admitted; but it is not so easy a matter to destroy with them either callous edges or fungous excrescences, or to produce a new and healthy surface in place of one that, having been long in a state of ulceration, is very irritable. All this may be done by a few touches of the lunar caustic. It has been

asked, by what magic does it act in ulceration? This is the magic by which it acts, and these are some of its medical properties.

How very distant is the probability of removing such filaments running across the urethra as Mr. Sharp has described, by the application of bougies? and on the contrary, how much more probable is it, that they may be destroyed by the lunar caustic? These filaments may have been originally coagulable lymph, thrown out by inflammation, and organized by time; and this may perhaps be a frequent cause of obstruction. In Mr. Hunter's 4th plate, in which a stone is delineated behind a stricture, it is most likely that the stricture might have been destroyed with this caustic, and the stone set at liberty. And this transverse filament (if I may so call it) was also very probably produced by inflammation, as other adhesions are, between the lungs and pleura.

The name of caustic to a feeling person carries with it a tremendous idea, and some who reprobate its application are equally ignorant both of the nature of the lunar caustic, and of its operation. By some, from a strange want of precision, its effects have been confounded with those of the *most violent caustics*.

From the effects of this caustic, when *externally* employed, much may be gathered of its

operation in stricture.—It is a compound of silver with the nitrous acid, and the mildest of all chemical caustics, the red precipitate of mercury excepted. It differs totally from the lapis infernalis, quick lime, butyrum antimonii, hydrargyrus muriatus and arsenic. It is infinitely less corrosive than any of them; having a more superficial and less extensive action. If applied to a wart on the hand, it will blacken the surface of that wart, but its effect is so weak, that it does not penetrate so as to occasion pain; and if the wart is to be destroyed, the black crust must be pared off without drawing blood, and the caustic applied repeatedly. When some days after the removal of a cancerous breast, there arises in the wound a spongy fungus, with a thin, fœtid gleeing; I have frequently touched the whole of this large and extended surface with this caustic, and the effect on the next day has been astonishing. Without producing a deep *slough* or *escar*, like other caustics, it has simply destroyed the diseased fungus, and at the same time mended the discharge with very little pain. Its operation seems to extend to the surface only, without occasioning the loss of substance attending the more active caustics, or the deep destruction of the more solid, living parts beneath. In ulcers, its effects are very great in removing the old and causing the generation of a new

appearance, more healthy, with a better and less discharge with a disposition of healing: it even softens the callous lips of ulcers. But, to come still nearer towards an explanation of its effects in stricture;—I have more than once seen a fungus at the orifice of the female urethra, which, though spongy, has caused considerable uneasiness and irritation, which have been removed by a touch or two of the lunar caustic, without injury to the sound parts, or doing any thing more than destroying the fungus, and producing a healthy sore, which has healed immediately: a similar effect it has had on the orifice of the male urethra; and venereal fungi, if lax and spongy, behind the corona glandis, may be destroyed by this caustic by a single touch. If a more evident proof of the superficial operation of this caustic be required, let the reader turn to Mr. Whateley's experiments, and to his rude application of it as stated (page 25, first treatise—Experiment 1, and 2—3.) and he will there see that after its action for one minute on a surface as large as a seven shilling piece (a time and a space not necessary to its application in stricture) it produced only a superficial slough, by no means deep or leaving after cicatrization any thing more than a smooth surface with a very small loss of substance, the size of a pin's head, with trifling indentation. Mr. Sharp was of opinion, that

fungous excrescences were some times met with in a stricture ; and in confirmation of that, do we not frequently see externally in old fistulæ in perinæo, fungi arise which keep up irritation and require to be destroyed by this caustic ? and may not the same kind of fungus also take place in the internal parts of the urethra in these fistulæ ? Do we not also find, that a common bougie passed in the most careful manner, will be followed sometimes by a small quantity of blood ? What does this imply, but that in such stricture there probably exists a fungus diseased surface ? The most careless observer cannot apply this caustic to an external ulcer, without perceiving the immense difference of its action from all other caustics (Hydrarg. Nitrat. Rub. only excepted ;)—they both act superficially, generally without producing a deep slough or eschar of the sound parts—they have both the very singular properties of thickening a stimulating, thin, gleety discharge in all ulcers, and of causing the generation of healthy granulations ;—their effects are weak on parts that are sound, but sufficiently strong to destroy diseased fungous substances : and Savin has an effect somewhat similar. Whether a gleet precedes or accompanies stricture, there is generally a discharge from one or more parts of the urethra in this affection ; and whether those parts be excoriated, ulcerated, fungous, or not,

the remedy seems to be the same ; apply the caustic in some form or other and the circumstances of the parts diseased, and of the stricture are changed : the discharge being ameliorated, they become less irritable, and a common bougie may be kept in the urethra with more ease to the patient than before—Go on cautiously with the same application, and the stricture will probably get more open, and the bougie make a greater progress. In this way may the lunar caustic, after a few applications, be assistant, as I conceive, to the operation of a common bougie. The gradual removal of stricture by this gentle treatment is one thing, and the destruction of it by keeping the caustic in so long, or repeating it so quickly as to produce great pain, considerable hæmorrhage, or strangury, is another. The structure of the corpus spongiosum urethræ is well known ; if the mucus (the natural defence against the acrimony of the urine) be excepted, there is but a thin partition interposed between that and the cells of the urethra naturally. These cells are turgid with blood whenever an erection takes place ; and they communicate with those of the glans. Against my inclination, I was once desired to remove a very small wart from the glans with scissars—scarcely a drop of blood followed, but at night, from exercise and the parts having been heated, a violent hæmorrhage came on, which

was restrained with difficulty. Bleeding, from the destruction of a diseased part, is very different from hæmorrhage excited by exercise, wine, women, or whatever increases the circulation after the action of caustics have made a way into the cells of the urethra. How cautious ought Surgeons to be in the application of them—how careful to enjoin rest, and cessation from every thing likely to irritate the surface to which they have been applied! How much attention is necessary, so to use them, as not to risque an hæmorrhage from the cells of the urethra! The general fact I believe is, that, at the contracted spot, in whatsoever part of the urethra it may be, the membrane is thickened, and the natural cells obliterated, or grown together. Otherwise hæmorrhage must have happened much more frequently from these applications. The partition between the mucous surface of the urethra and the corresponding cells in a natural state is extremely thin. It is not so at the part immediately strictured, for there the cells do not communicate. It is therefore of consequence if hæmorrhage be an inconvenience, that the caustic be applied to the *stricture only*.

I apprehend the lunar caustic does not generally destroy the stricture at once, its action is probably too weak for that; but it makes a way through it by degrees, relaxing and widening the contracted part by little and little. If

it meets with ulceration, caruncles, spongy excrescences, or fungi in its way, these it destroys. How it may operate on what has been called carnosity or callosity, I do not precisely know; but it is very possible it may tend to widen a diseased passage through a callous or thickened part of the urethra, without destroying it absolutely. And if it will do this, it will tend to the relief of many distressed persons, though it may not actually cure the disease. And thus, in these cases, be a great help to the subsequent effect of a common bougie. In strictures, and indeed in all diseases of the urethra, bladder and kidneys, there are paroxysms of irritation, and states of comparative ease. During the former, even a common bougie should be used with great caution, or wholly omitted; and if necessary applied only in the latter. This remark is obviously more necessary to be attended to before the application of the caustic, than before the introduction of a bougie. It has been said, that the hæmorrhage which sometimes follows the caustic, tends to take off alarming symptoms; and no doubt it may, because it is an evacuation, immediately from the part; but whenever it happens, it is an accident, and not a circumstance necessary to the operation of the remedy, and probably proceeds from having opened some of the cells in a sound part of the urethra, and must be distinguished from that sort of bleeding occasioned by the destruction

of an excrescence, fungus, or the stricture itself, on which the caustic may more immediately act. Strangury and suppression of urine are also circumstances certainly not necessary to its action, and should be most carefully avoided. And they may often be obviated by using this application cautiously, and not doing too much at a time, nor employing it too frequently; like every other stimulant to the urethra, its effects must be watched, and, if necessary, counteracted by the usual means; the patient should be perfectly quiet, he should use no exercise, nor any excitement to irritation for some time after having been touched; nor should he expose himself to cold immediately after the introduction of a common bougie or caustic; nor should either of them be employed in cold weather, without artificial warmth, so that the spasm from cold, and the resistance from an over stiff bougie may be avoided; nor in warm weather when a person is heated with exercise; nor should the surgeon pass too large a bougie forcibly, before he introduces the caustic. These precautions are more particularly necessary when caustics are employed, and are applicable both to the lunar caustic and Kali purum. There can be no doubt but the most alarming symptoms have been brought on by the very gentle introduction even of a *common unarmed bougie*; so highly irritable some-

times is the urethra! and this is a truth of which no practitioner should ever lose sight. Fainting, rigor, fever, strangury, great irritation, and suppression of urine have come on, when no violence has been used, from a common bougie, although it has passed with the utmost facility into the bladder, without any impediment to its progress; but these accidents have happened more frequently in stricture. The state of the parts therefore should be considered previously; as well as the effects of all applications intended to be made to a diseased urethra. No man of experience can doubt of common bougies sometimes doing much harm, as well as good, in strictures; and this may tend to lessen our fears, when the above accidents arise from the lunar canstic. It is, I believe, an undoubted fact, that the action of this application diminishes the great irritability of the urethra in some strictures, an irritability which no bougie can so readily remove, and which is a great impediment to the operation of all bougies, and renders them sometimes, not only useless, but hurtful. In this it has an original and distinct effect; an effect peculiar to itself and perhaps not attainable by any other means. The theory, whether true or false, above adopted, explains this matter. And though the morbid anatomy of Wiseman, of Mr. S. Sharpe, of Daran, and others, may not per-

haps be so correct as that of more modern Surgeons, yet it may lead to the elucidation of a practical difficulty under which we have long laboured. And, as was before said, if caruncles, ulceration, or excrescences ever take place in stricture, they are probably the causes of that morbid irritability, which the caustic so readily takes off. These being removed, a common bougie will act with less pain and more certainty than before: and the stricture becomes more curable, whether the cure be attempted afterwards by the bougie, by the caustic alone, or by both. The destruction of an excrescence or fungus, or the renovation of a healthy surface, in place of a diseased one, must be distinguished from the immediate destruction of a stricture, considered as stricture merely, by the action of this caustic, whether it be of a considerable size or not. For the one is a superficial, and the other implies the formation of a deep slough, from the separation of which, some of the cells of the urethra may be opened, and a *solutio continui* produced where there was none before, and where there ought to be none; with all those other inconveniencies for which the caustic has been blamed. Its action, in my opinion, should be superficial only. If Mr. Home aims at the destruction of the stricture itself at once, it is very possible the mildest of all chemical caustics

may do a great deal of mischief. If other proofs were wanting, from the numerous applications necessary in some obstinate cases to afford relief, it must be evident that its operation is superficial, of which I believe Mr. H. has been fully aware, and that it is capable of being highly beneficial without producing much irritation or considerable destruction of parts.

One argument for its superiority over common bougies is, that the contracted part, or different strictures in the same urethra, cannot be brought by the latter to the common diameter of the canal; and that the caustic effects this purpose more certainly than the bougie. This may be admitted, if we suppose the caustic produces the destruction of the contracted part immediately; but this is problematical, and cannot happen but in a very trifling stricture. And I believe that neither the one nor the other, though they may widen the stricture for a time, can keep the part before contracted as open for a long continuance, as the passage was naturally, whether the cure be attempted by bougie or caustic: a stricture once formed, will ever after be more or less disposed to contract again; and that disposition will be strongest where the canal is most contracted *naturally*, as at the further end of the bulb. Now a natural contraction may be widened, but should not be destroyed. Des-

truction, when applied to stricture, (as stricture merely) without reference to ulceration, fungus excrescences, or a diseased internal surface, would only lead ultimately to more permanent contraction, as in some burns, or to some other inconvenience. I conceive that the general effect of this caustic is superficial; and that it is not sufficiently strong to destroy a callous ring in the urethra, if a stricture may be so called, by a few touches, but by an action gradually kept up at longer or shorter intervals, and by an operation not so slow, but quicker and stronger than that of a common bougie.

Whatever the future opinion of this practice may be, Mr. Home's observations have thrown more light on the diseases of the urethra, and the means of relieving them, than we have been hitherto in possession of. Much praise is therefore due to him. And whether it be in itself a cure, without the aid of other bougies, by the destruction of stricture, or by the removal of diseased surfaces, fungi, or excrescences, time will unfold. And it will show also, whether, in the cure of stricture, we are to look to the lunar caustic alone, or conjoined with the more established practice of using bougies; or to bougies alone, or any other modification.

It is a fact, as was before hinted, that there

are many strictures in which bougies, whether they be from Daran or any other person, will make no impression; and a something is still wanting to the mechanical and suppurative action of bougies in general use. That something, which Wiseman and Mr. Samuel Sharp seem to have wanted, they would have found probably in the lunar caustic; with the effects of which they do not appear to have been acquainted. As to the superiority of Daran's bougie over some others, from its supposed medication, I have doubts.

Wiseman's bougie, with red precipitate, and Mr. Sharp's with crude mercury, were employed with the intention of producing more suppurative effects—and these may deserve a further trial. But there is nothing in Daran's composition (if the composition lately published be authentic) so suppurative as these. The most stimulating of the two bougies, namely, that in which levigated precipitate entered as an ingredient, in the opinion of Mr. Sharp, had no better effects than other bougies; so perfectly enveloped was this caustic in plaster: and of the two, that with crude mercury seems to me the best composition.

Without entering into the question, how far M. Daran's bougie was or was not medicated; it was certainly well made; and probably introduced with caution. But the cir-

cumstance on which success more immediately depended, was the mode in which it was secured within the urethra, and fairly up to, or within the stricture; which was by means of a candle-wick attached to its larger extremity, and fastened by a particular knot round the glans; and in this situation it remained firm and almost immoveable. The pressure of its smallest end or point producing a kind of ulceration, that relaxed the strictured part; so that the bougie after entering the contraction fairly, in time and by slow degrees carried on the work of dilatation—and such has been the operation of every bougie, since the time of Daran, without medication. The compositions for bougies vary, there are some which are more or less astringent, though the intention is to cause suppuration on a mucous surface; and there are others too stimulating from the quantity of Burgundy pitch. There are others again much less stimulating; but the best are those which do not irritate, which have the requisite form, polish, and strength, without being too stiff upon being slightly warmed with the fingers or fire.

We need not be surprised, if pressure should produce ulceration at the entrance of a stricture, and thereby tend to its destruction, though there be nothing corrosive at the end of a common bougie, more especially as the ex-

traneous body is an unnatural irritant on a very tender mucous membrane. Pressure long continued will render carious and destroy the structure even of bone itself, as we see in some aneurisms.—But the parts for the bougie to act on are sometimes too irritable to bear it; and this is a difficulty of no small magnitude in some strictures; and there is also another, viz. that after passing, with great care, a certain way, or dilating to a certain degree, no further progress can be made. In these cases surely either Mr. Home's method, or some modification of it, may be worth the trial; though the cure be conducted ultimately with a common bougie.

It appears there may be more than one stricture in the same urethra; and it is also evident that upon the opening and enlargement of the parts contracted, the symptoms generally cease. It may be necessary to ascertain whether there is a free passage from these strictures into the bladder, but the application of bougies should be directed to the strictures principally without suffering them to irritate the neck, or be introduced constantly into the bladder. Our progress even in the membranous part of the urethra with a common bougie should be made with great caution; but when a way is to be effected beyond it, the cure becomes much more difficult; and should be attempted (if at all) by the bougie only. The

application of the caustic, in my opinion, should be confined principally to strictures in the anterior part of the urethra,—the membranous part is dangerous ground, and I should be very unwilling to apply it near the verumontanum or prostate, for obvious reasons. An indiscreet, improper use of it, however, is not a sufficient argument for its being discarded or reprobated as a dangerous innovation in practice.

In cases of hard callous stricture, on which a common bougie can make only an imperfect impression, I see no objection to its adoption ; much good may arise from its making a progress more speedily and with greater certainty than the bougie ; but that done, the cure may be prosecuted without it. The principal obstructions anteriorly being removed, I should depend on the bougie alone, and look for a sufficient effect to free the farther part of the canal and neck of the bladder from any great embarrassment.

I had been long accustomed, before the introduction of this method by Mr. Home, to cure by far the greater number of strictures without caustic ; and I can see no reason for using it, when the strictures can be relieved with certainty in the old way. But it may be adopted under certain modifications, when that method fails. The effects of a well-made bougie of materials not irritating and (without the idea of medication) of a due polish and consistence, have been

long well understood. They are not in all cases equal to our purpose; it is therefore matter of useful inquiry to ascertain what the caustic will do. Contraction will, as far as I have been able to inform myself, take place from both methods at uncertain periods; but in the old method there is an increased secretion from the part or parts obstructed, and also from every other point of the urethra in contact with the bougie. In the other, an opening of the obstruction is obtained, either by the destruction of parts diseased, as fungi, &c. or the destruction of the contracted part itself. The two methods are extremely different, and yet may be made subservient the one to the other. If Mr. Home wishes to enlarge the contracted part to a certain extent by a gradual operation only—that may be done in a gentle manner, and without using violence.

I believe its action, unless it renovates a diseased surface, removes a caruncle, fungus, excrescence, or filament, merely, without destroying the stricture itself, could not produce that relief which it has done, without great inconveniences arising immediately, or in course of time, from its application.

When Mr. Home says, his intention in removing stricture by the caustic is to bring the contracted part or parts of the canal to the same diameter as the sound urethra, was not

the same thing formerly attempted by a common bougie, and to a certain degree attained? If his object is to destroy the urethra itself in every stricture wheresoever it may be situated in the passage, in his endeavour to enlarge the part strictured, and bring it to the natural size of the canal, I cannot agree with him; because strictures may, and they frequently do take place where there is a contraction naturally; and if these obstructions can be relaxed, opened or enlarged by a bougie, where is the necessity of removing them by caustic? For instance, between the bulb and membranous part of the urethra there is a natural contraction, no doubt for very useful purposes: when stricture takes place at this spot, is it not much safer to enlarge it by a bougie, than destroy it by a caustic? A false route, and superficial ulceration are certainly producible by a common bougie, and the latter may be sometimes unavoidable. But whenever this is produced, it is superficial only, and at the stricture; there is no absolute destruction of the urethra any where. If the caustic really acts with great power, causing considerable loss of substance of the strictured part, probably it may occasion in some instances the adhesion of the sides of the membrane to each other; and if it does, it leaves a new difficulty behind. To obviate this, it should be employed with great deli-

cacy, and a common bougie should be introduced so as to prevent such adhesion, as soon after the application of the caustic as possible. This too is an additional reason for enjoining rest and the most perfect state of quietude afterwards. How careful ought surgeons to be, by large dilution, the injection of oil, and the introduction of a bougie, to prevent the possibility of adhesion after the application of caustics?—How easily does the abolition of the cavity of the tunica vaginalis in hydrocele by the seton take place, by the adhesion of two inflamed or suppurating surfaces? And it would likewise happen from the caustic, if the frequent passage of the urine did not prevent its sides from collapsing into contact. Wiseman injected oil after his caustic; and every bougie armed with the lunar caustic should be well covered, caustic and all, with oil before its introduction, if used without a cannula. Abscesses and fistulæ in perinæo have been cured frequently in the old way by bougies. But in such affections, the lunar caustic has an advantage over this method. It has (it is allowed) a power of healing sores or ulcers of almost every description; and the application of it to the internal part of the urethra, when the urine insinuates itself through a breach in the membrane, may be of the most singular service, healing one or more orifices, not to be done otherwise without much difficulty. Many fis-

tulæ are not curable in the old way, some are not relievable, even with the assistance of the caustic; but it certainly adds something of consequence to our means of cure. No bougie can do that on an ulceration, whether in the internal or external parts of the urethra, which this caustic can. It cannot destroy an old diseased surface, and cause almost immediately the generation of a new surface less irritable and having the strongest propensity to heal. The caustic acts with respect to this affection upon a principle, which no bougie, unless medicated according to Wiseman, or the late Mr. Sharp's plan, can; and even these would probably have a much weaker effect. If the use of the caustic was confined to abscesses and fistulæ in perinæo, without reference to other cases in which strictures prevail, it would be of the utmost importance; but when the number of strictures are also considered in which the more general method fails, it becomes truly valuable in the art of surgery.

With respect to the application of the kali pur. I much question whether it has the same efficacy in fistulæ in perinæo, as the lunar caustic, for it is not a pus movens. It is literally a caustic, without any quality tending to ameliorate, or thicken a glæty discharge, or to cause the generation of sound healthy granulations in common ulcers.

Mr. Home's method appears to me capable of still greater modification. It may be said that there is a difficulty in applying the caustic to distant parts of the urethra, without its hitching as it goes along, and touching some of the sound lacunæ. This may be prevented by passing it through a canula of elastic gum, open at its extremity, and so rounded off as to slip with ease up to the stricture. But even this idea admits of improvement. Take a small bougie, or one of catgut; cut the point off so as to make its extremity flat and smooth, fitting the bore of the above canula: put the smallest portion possible of melted wax on this flat surface, so that it may adhere superficially; whilst the wax is soft, dip that surface so coated upon a small quantity of the lunar caustic, previously reduced to a fine and almost impalpable powder, and pass it up to the diseased part or stricture. If a weak solution only of the caustic be required, or one of any degree of strength, a small piece of sponge, well secured to the end of a whalebonestilet, will easily convey it. And in the above way red precipitate also might be applied, either by itself, or mixed with cerate. In like manner, the caustic mixed and enveloped in cerate might be used. Thus, by a gradual process, without aiming at the immediate destruction of the stricture, and probably with little pain or irritation, without the danger of accidents, may

this useful caustic be employed. What effect it might have, if finely powdered and mixed with plaster, and applied to the extremity of a bougie, I do not know. I apprehend however it would cease to be a caustic, and become a suppurative, like the red precipitate. But, according to the consistency of the plaster and quantity of the corrosive introduced to the composition, so will it approach to the nature of a caustic or that of a suppurative. And in this sense also it may be assistant possibly to the cure of strictures, and the action of a common bougie. And this, as well as the precipitate in plaster, may, I conceive, be employed as medicaments to a bougie; and applied, as well as a solution of the caustic, in water, or vitriolic solutions, to a *gleet*, which seems to be nothing more than a partial concentrated effect of irritation long continued, or of ulceration in some one or more parts of the urethra; and the one class of remedies may cure by causing the generation of a new healthy surface in place of a diseased one; the other, by its astringency in merely lessening secretion. These hints are thrown out, however, not as facts fully established from practice in diseased urethræ, but as matter of future inquiry.

In course of practice I have seen many cases of stricture of an old date in which bougies were of no avail; but the following was so remarkable

in its circumstances, that I must beg leave to subjoin it. I know not how far Mr. Home's method, or a modification of it, might have been attended either with palliation or a more curative effect; but this I make no hesitation of saying, had I known as much as I know now, I would have recommended this method, or a modification of it, before the last fatal attack, which I conceive to have been primarily on the kidneys. And the history will tend to show the great resources of nature, the great irritability of the urethra under particular circumstances, especially when connected with an affection of the bladder and kidneys, the difficulties attending the common action of a bougie, and the hope that may still remain of relieving a suffering individual in a desperate state by the use of caustics. When I reflect on this and some other cases similar to it, the old rule of practice occurs to my mind, "that a doubtful remedy is better than none." But that remedy, if employed, should have been when the urethra, bladder and kidneys were not beset with a great degree of acute morbid irritability. No man should attempt the operation of lithotomy in what is called a fit of the stone, when the bladder and all parts in connexion with it are highly irritable; but during an interval of ease: and the same doctrine is applicable not only to the lunar caustic, but to the introduction of a common bougie.

A young gentleman of 18 years had, in consequence of a gonorrhœa virulenta, an abscess in perinæo, which was healed by internal medicines and external means only, without a bougie ever having been introduced or worn to promote the healing of the sore or remove the probable obstruction. In 1778 he was salivated for secondary venereal symptoms, (eruptions,) and cured. In 1783, in consequence of the old diseased state of the urethra, which had never been treated with a bougie, he was seized with a suppression of urine, lasting seven days and as many nights. It was impossible to pass either bougie or catheter. Bleeding, the warm bath, oil, opium, and tepid water, frequently injected into the rectum, were the principal means of relief. His urine after that length of time forced its way with violence, and he emptied his bladder at once. Though relieved from imminent danger, he continued to neglect the trial of what a bougie might have done towards removing the stricture afterwards, until he was aged 57, (in 1795) when the difficulty of passing his urine became greater, voiding mucus, sometimes a small quantity of blood, and sometimes gravel and small stones. At this period, whenever his avocations in business would allow him to attend to these complaints, he submitted to have the bougie tried. At different times it was introduced with great care, but after getting

a short way into the stricture and towards the bladder, pain, heat of urine, a quickened pulse, even shiverings, would come on, attended also with an evident disposition to suppression of urine. With these impediments occurring, the bougie was repeatedly used, and occasionally discontinued to quiet irritation, without making any considerable progress. Although he had sometimes frequent calls to discharge his urine, yet at times (more particularly when in a warm room, and even after drinking a quantity of wine or other fluids,) he would make it with perfect freedom; this latter circumstance seemed to depend on a copious secretion from the kidneys, filling the bladder and forcing a stream of urine from behind, through the obstructed part. Thus, did he rub on for a great number of years, the urine itself keeping the obstruction passable, in the natural course of the canal, and in a direction contrary to our attempts by a bougie. The latter is an artificial, but unnatural way, of keeping a greatly obstructed urethra open; the other is a natural one, and if we could imitate this by large dilution, increasing the secretion from the kidneys, it would be a force applied from behind, propelling the urine forwards by the united action and general consent, both of kidneys and bladder, and thus by its stream dilating the stricture. The mouths of the lacunæ open outwards and not in-

ward. This fact explains why the bougie and caustic sometimes hitch in the lacunæ, and why a larger sized bougie will pass when a small one will not, and why a false route may sometimes be made by these as well as other instruments for drawing off the water. And lastly, why patients too often express pain, sensibility, and spasm, by attempts against the natural course of the passage, sometimes injurious to its structure. So favourable are the lacunæ to the progress of the stream of urine from the bladder forwards, that it is possible some obstinate strictures may be long kept so far open as to suffer the functions of the several parts to be performed, though in an imperfect state, without any hazardous symptoms coming on, by the mere force of the urine in sufficient quantity from the kidneys only; and if, by means of an opening made behind a stricture into the urethra, we could pass a bougie in the same direction that the urine passes naturally, over the lacunæ towards the penis and through the stricture, we might possibly relieve in some cases where we now fail.

General and topical bleeding, relaxants both externally and internally, opiates and laxatives, &c. were at different times used: amongst the latter, manna had frequently a good effect. The bougie he could not bear at the stricture; and even touching gently the anterior part of the urethra

by keeping in, for a short time, a few inches of a bougie, produced too much uneasiness, and had not the effect I have seen in many other cases. Once, when I had with great tenderness and caution passed the smallest bougie some little way into the stricture, he thought his symptoms relieved; but as I proceeded, although with the greatest gentleness, shiverings and fever followed. This happened so often during the course of my attendance, which was not constant but occasionally only, for years, that I was convinced there must be not only permanent stricture, but disease of the prostate, kidneys, and bladder, probably connected with stone. The prostate I could feel per anum enlarged, hard, and pressing into the rectum, which occasioned a frequent forcing, not only of urine involuntarily, but of fæces. He had moreover a frequent disposition to piles, which never bled, but there passed sometimes from the urethra a kind of bloody gleet, and blood itself in the urine. He had sometimes pains in his back; some perhaps muscular, rheumatic, or gouty; but at times he had a more decided pain in both kidneys, his urine would be frequently quite clear, and yet sometimes contain a quantity of mucus, and some small portion of blood. These circumstances, when compared with the shiverings, fever, &c. produced by a common bougie, convinced me, that the several parts were much too irritable to

bear it; and having met with similar cases failing me in the same way, I wholly desisted. He would, I believe, have submitted to the caustic, had that been urged; but knowing the state of the prostate gland, reflecting that he could not bear even a common bougie used in the most guarded manner, and believing his stricture was of that kind, that it would have done no good, but probably have hastened his end, it was not attempted. And indeed some instances of suppression of urine arising from the caustic, which he had heard of, had alarmed him so much, that the idea was given up.

He was strongly predisposed to a suppression of urine, but without any absolute suppression taking place for some months before his death. At length, however, when verging towards 60, whether it was from a few small doses of balsam capaivi producing inflammation, that had been recommended, from a gouty attack upon his kidneys, or from both, I cannot say; but such a total suppression came on with violent pain, &c. in the region of both kidneys, as baffled every effort for his relief.

Upon examination after death both kidneys were found greatly diseased, but one much more enlarged than the other; the prostate very hard, and thoroughly diseased also; a stricture of considerable extent, callous and impervious; a thickened and contracted bladder, and a large

quantity of matter in the pelvis and substance of the larger kidney, and ulcerations on the exterior surface of the other. The distention of the bladder in this suppression of urine was neither large nor equable, but more to one side than the other, and that side corresponded to the larger kidney. I suspect that there was but little secretion of urine from either of them.

This was an instance of very great irritability of all the parts, in connexion with stricture, probably occasioned by that general consent which naturally pervades them, but which from disease long kept up was greatly heightened. The abscess in perinæo was at the age of 18; the first suppression of urine 25 years after. From that time, the prostate, the bladder and kidneys were getting gradually, partly from age, and partly from other causes (*viz.* gout, or disposition to the gravel and stone) into a morbid state; the stricture all this time remained without any thing having been done towards its removal, from youth upwards. And when at last the bougie was employed, the obstruction was so great, and the general tendency of other parts to irritation, so firmly established, that no progress could be made; to this, I attribute in some measure the failure of the bougie, which, if applied at a more early period, might have been attended with success. It is very remarkable,

with such permanent disease about him, that the mere daily secretion and evacuation of his urine should, for so many years have been sufficient by the force of its stream alone to keep the passage open, with but one single suppression of seven days and nights from the date of the abscess in perinæo at 18 to the last suppression when near 60. It was extremely perplexing to ascertain how far the stricture was the original cause of all the symptoms which followed, or how far it was connected with disease in the kidneys, bladder and prostate, and coming on as these affections do come on, where there has never been a stricture, or abscess in perinæo. A case elsewhere given shews that abscess and stricture may not only exist, but be cured without the latter bringing on an affection of the kidneys, though one kidney was nearly destroyed before the formation of these complaints. In short, the two affections may be perfectly distinct, although the one may influence the other from sympathy in particular cases. In my judgment, in the above case, disease had subsisted for a considerable time, not only in the prostate, but bladder and kidneys, previous to the last suppression. A suppression of urine, lasting only a few days, would neither have caused the diseased prostate nor the enlargement of the kidneys; and the train of symp-

toms shewed, that these had been long forming ; but the matter in the largest kidney was probably the more immediate effect of gouty or phlegmonous inflammation, and the morbid state of the two kidneys, I suspect, brought on the suppression. If these organic affections had not taken place, there might have been no suppression ; and the urine probably would still have continued the office it had done for many years, of keeping the strictured part of the urethra pervious. But it is also probable, that if he would have submitted to the caustic, or a modification of it, to the anterior part of the stricture only, before his kidneys became affected, and before the last attack, so as to have made a way partially towards the bladder ; that his complaint, so far as it depended on stricture, might have been relieved, at least for a time.

The application of bougies, as Mr. Home has stated, is sometimes partial and incomplete, not so much I believe from want of power as the inconvenience of attending daily to their slow and progressive operation. The lunar caustic being a remedy infinitely more active than the common bougie, requires less perseverance in its use, when well conducted, and not such constant attendance, but its effects should be carefully watched to prevent the accidents to which it is liable. The same reasoning will

apply to every modification of it, and every attempt hitherto made to improve upon it. But there are a prodigious number of cases relievable, and many curable by common bougies without any risk, comparatively speaking, immediate or remote, and almost without pain. Such persons therefore as chuse to go through the new, shorter, rough road, instead of the smother old one, may make their election, and proceed the way that pleases them best. Many persons do not like restraint as to their engagements and pleasures; many do not like a slow mode of cure how safe soever it may be, but prefer a more expeditious one, though more painful and hazardous. Many chuse a caustic, because they have an idea that no common bougie will dilate the stricture sufficiently. This is a mistaken notion as to many strictures. I apprehend the best reason for adopting this new practice is in cases of real difficulty, wherein the bougie fails of producing the desired effect, and in this opinion I believe Mr. Home and Mr. Whateley will agree. In my judgment the indiscriminate application of caustic to every stricture is not warrantable, how modified soever it may be. Many thousands of persons have not only been relieved, so as to pass their lives comfortably, but cured by the old method of using bougies.

I have not either the inclination or the re-

quisite leisure to criticise the works of some gentlemen who have opposed Mr. Home's method. His valuable observations are before the public, and amongst the more intelligent part of the profession they will be duly appreciated, for the many numerous and important facts they contain on the subject of strictures and means of relieving them—and to his credit, be it said, that he has been greatly instrumental in shewing the way and laying a solid foundation for subsequent improvements.

The mode of applying the lunar caustic by touching the stricture for a short time with the caustic in substance, appears to me preferable to the use of it in powder, because a trifling solution then only takes place on the surface of the disease, if the touch be slight; without the chance of any particle of the caustic itself, however small, remaining attached to the part to which it is applied; and if such particle remains at a stricture, it will irritate much more than the simple touch, without dissolving; and may continue to irritate till it is washed away by the urine. The first method described by Mr. Home, was a touch, and the slighter it was, and the smaller its surface of contact, the less it would irritate; that of Mr. Whateley, in which the caustic was fastened and secured by means of glue to the end of a bougie, was of a similar kind; his second method, in which the

fine powder was incased in a solution of gum arabic, was intended to render the caustic less stimulating; and so it probably was, for its natural difficulty of solution must have been, by the envelopement in gum, increased. And I should not wonder if it gave no pain, for it could not, I think, operate merely as caustic. The attachment of a very small quantity of the powder reduced to the utmost degree of fineness, and adhering by means of bees wax to the end of a catgut bougie formerly mentioned, was, I think, much better calculated to answer the purpose of touching with the caustic fairly; without leaving any particle of it behind, and without the uncertainty of an equivocal action.—The bougie armed should be small; and if small the surface of contact will reach only a short way, if applied only up to the stricture through an elastic gum catheter, in order to prevent a possibility of its hitching in its passage. And I cannot conceive why the gentlemen who use both the lunar caustic and kali purum have not availed themselves of so useful an instrument—for by means of it caustic may be conveyed to the disease only, and with the utmost precision; and without the smallest danger of injuring the sound parts as it goes along, or the natural cells of the urethra, in the immediate neighbourhood of the stricture. It is a matter of no great consequence

whether the lunar caustic at first touches the stricture superficially, or passes a short way into it; by due attention, and after a time it may be carried farther, and thereby facilitate the great work of dilatation or widening of the contracted part; and the cure may be finished by the caustic alone when the stricture is not beyond the bulb, or by assisting its previous operation; with a common bougie, passing gradually through the membranous and more dangerous parts of the urethra, till the latter fairly enters the bladder.

Although Mr. Whateley allows of the propriety of using common bougies, yet he has thrown them in the back ground, and adopted Mr. Home's practice under certain modifications. In 1801 he proposed the method of fastening the lunar caustic (as was before said) to the extremity of a bougie by means of glue. He has since that made another alteration by endeavouring to secure it with a thick solution of gum arabic. He has lately changed his caustic, and given the preference to the kali purum. Many persons unacquainted with medicine do not know that this is one of the most violent caustics in use for making the deepest slough, taking away small tumors, opening abscesses, and laying a carious bone bare.—Violent as it is, Mr. Whateley has contrived with great ingenuity, by employing it in the

smallest possible quantity, to render its application safe; and it is said to produce little or no pain, and to be preferable to the lunar caustic, though he still continues occasionally to use the latter. When I observed in his last publication the three very small dots expressing the largest, the medium, and the smallest quantity of the kali purum recommended, I was pleased with the thought. But when I reflected how soon these diminutive portions would probably liquefy in the air, not only during the time of fixing them to the bougie, but afterwards when kept for use, covered with lard, in a bottle or case, and during a movement of two minutes up and down, after it had entered the stricture at the opening previously made by a small common bougie, I conceived that its caustic property might possibly be altered. And upon reading a little farther, I found Mr. Whateley himself acknowledgès that this caustic formed soap; probably from its combination with the lard, or with something mucilaginous it met with in the stricture itself, or in its passage to it. When Mr. Whateley, as a previous step to the introduction of the kali purum, advises a way to be made through the stricture and into the bladder by a small common bougie, a great and important point may be gained; but when gained it will supersede in many instances the application of both

caustics; gradual dilatation, with that mucous discharge, which are inseparable from the retention of a bougie for a few hours daily, will do the rest; at least to a considerable degree. An effect of which Mr. S. Sharp was long since fully aware, and has very accurately explained in his critical inquiry.—I do not mean however to say, that a bougie can always dilate the urethra so completely, or to the same width as the lunar caustic or kalipurum, because it produces no loss of substance whatever, which these certainly do to a greater or less extent. And of the two, the kalipurum, if it does not act merely as soap, must produce the deepest slough, which Mr. Whateley would probably have found, if he had made the like experiments with the kali purum as with the lunar caustic. What the precise operation of the kali purum may be in stricture, according to his method, I cannot say. I have known of from long experience that, when applied even largely to the skin in an uninflamed state, it produced but little pain. I can therefore believe, that the very small quantity employed by Mr. Whateley in stricture, may also cause but little uneasiness. If I may judge from its application to the skin externally, it produces a deep slough: the destruction of parts, both from its superior activity and its very ready solution, is more diffused, and much greater, than from the application of the lunar caustic to the same surface, but when the

slough is once formed, or the eschar made, the irritation ceases; the part to which it has been applied, being as perfectly insensible, as if it was mortified. The lunar caustic, when applied to the skin, produces no slough, but merely a blackness without pain, and when to the urethra a superficial slough only, unless rubbed for a considerable time on an extended surface. The passage of the bougie previously, as recommended by Mr. Whateley, is an important circumstance. The direct application of an extremely small quantity of the caustic, and its properties, so different from the lunar caustic, may be advantages in its favour, and perhaps tend to widen the contracted part more certainly and more speedily than the lunar caustic; but the practice is new, and but lately adopted, and time has not yet established its superior utility. Mr. John Hunter in his time made great efforts to improve the then practice in strictures, by various valuable suggestions. Mr. Home has pursued a similar track—and introduced the lunar caustic. Mr. Whateley has followed, and proposed as an occasional substitute, the kali purum.

For a full account of the practice, I must refer the reader to the original writers. I have only to remark, it may be said fairly that the several methods of employing the two caustics in stricture have added considerably to the resources of modern Surgery, but in my concep-

tion they should be limited to such cases only as are not relievable by more gentle means, namely, the careful and judicious application of a well made common bougie. With due care and attention caustics have succeeded where this method has failed. But their indiscriminate use in the slightest, as well as more obstinate cases, appears to me unwarrantable. The hazard and difficulties are obvious, the practice is yet only in its infancy, and there has hardly been time sufficient to form a correct judgment as to the permanency of many supposed cures.

With regard to the more distressful cases, the great fact is established of not only relieving, but curing under circumstances heretofore reckoned almost desperate, and without remedy; in which attempts were formerly made to attain the same ends by methods more precarious, and much more painful than those by caustics. It was often a great, and in some cases almost an insurmountable difficulty, to get through callous obstructions anteriorly or more deeply seated in the bulbous part of the urethra; that difficulty may be lessened almost in every case by caustic, and in some actually removed—after which the cure may be left to the gradual and less dangerous operation of a common bougie.

THE END.













